ORDER NO. EMID0106020C0

A4

Service Manual

Digital Piano

SX-NP10

Colour

(M) .....Walnut Type

Areas

(P) U.S.A.

(PC) Canada

(EX) Norway, Denmark, Poland, Spain, Portugal

(EG) Germany, Switzerland, France, Italy, Austria, Netherlands, Belgium

(EB) the United Kingdom

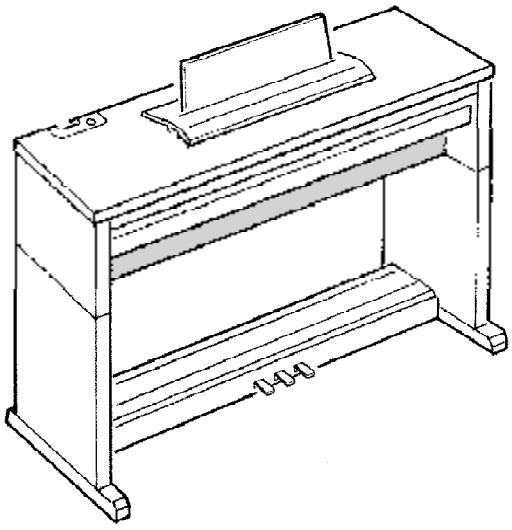
(GH) Hong Kong

(GT) Taiwan

(GM) Malaysia

(GU) Thailand, Indonesia

(GN) Australia, New Zealand



SPECIFICATIONS

SPECIFICATIONS

KEYBOARD	88 KEYS (WITH TOUCH RESPONSE)
SOUND GENERATOR	PCM
MAX. POLYPHONY	32 NOTES
SOUND	8 SOUNDS:GRAND PIANO, UPRIGHT PIANO, E. PIANO 1, E.PIANO 2, HARPSI, VIBES, STRINGS, PIPE ORGAN
PEDALS	SUSTAIN, SOFT, SOSTENUTO
FUNCTIONS	MAIN VOLUME, MIC VOLUME, DEMO, TUNING, REVERB, BASIC CHANNEL, LOCAL CONTROL
TERMINALS	PHONES×2, MIDI (IN, OUT), AUX IN (R, L), LINE OUT (R/ MONO, L), MIC, USB
OUTPUT	80W (40W×2)
SPEAKERS	14cm×2
POWER REQUIREMENT	85W/ 110W (NORTH AMERICA AND MEXICO) AC120/ 220/ 240V 50/ 60Hz AC120V 60Hz (NORTH AMERICA AND MEXICO) AC230-240V 50/ 60Hz (EUROPE, AUSTRALIA,NEW ZEALAND, SINGAPORE AND PHILIPPINES)
DIMENSIONES (W×H×D)	142.3cm×98.7cm×55.9cm (56-1/32”×38-27/32”×22”) D: 45.1cm (17-3/4”) when the keyboard section is closed.
NET WEIGHT	58kg (127.9lbs.)
ACCESSORIES	MUSIC STAND, AC CORD, CD ROM

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics®

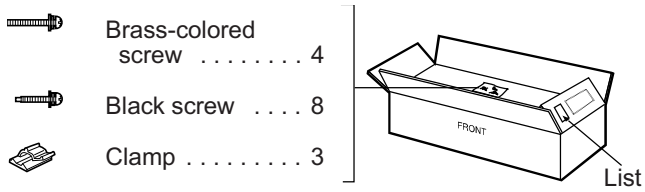
1. Warning

To prevent the risk of fire, smoke, or electrical shock and to ensure safe operation, please be sure to follow the safety guidelines below.

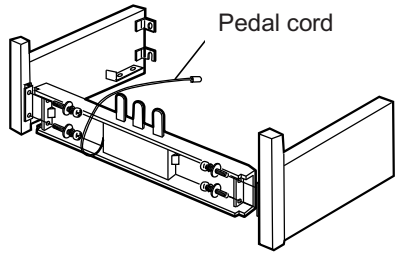
Follow the steps below to assemble your Technics piano. Make sure you are using the correct parts and that they are in the correct direction.

- At least 2 people are required for assembly.
- To disassemble the piano, reverse the procedure.

1. Remove the packing and take the parts out of the carton. Confirm that all the parts on the printed list are present.

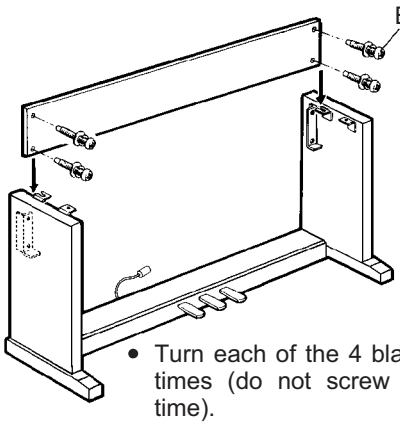


2. Affix the right and left side planks to the pedal box.



(1) Use the 4 brass-colored screws to secure the planks.
(2) Loosen the pedal cord, stowed on the inner side of the pedal box, and extend it.

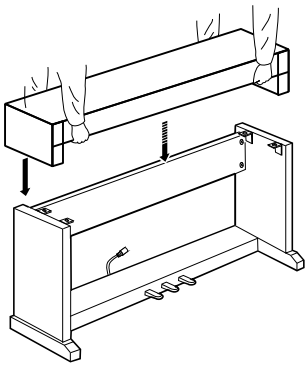
3. Affix the cross bar.



- Turn each of the 4 black screws 5 or 6 times (do not screw in tightly at this time).

4. Place the piano body on the stand.

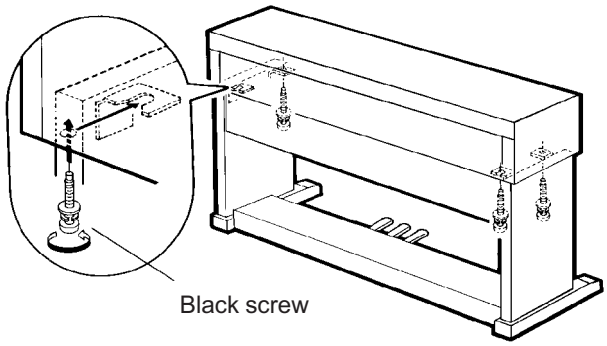
WARNING:
Avoid pinching your fingers.



Note 1
Holding the piano body at least 10 cm in from the edge, place it on the stand so that it does not fall off.

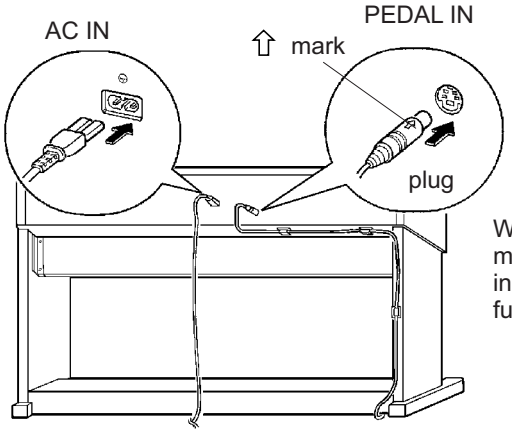
Note 2
If the piano body is placed too far to the right or left, or to the front or back, it will become unstable.

5. Secure the piano body to the stand.



(1) Insert 2 black screws in the 2 rear screw holes on the underside of the piano body, and turn each screw 5 or 6 times. Push the piano body forward so that the screws are fully inserted in the cutout of the metal piece on either side plank. (This enables you to easily position the piano body on the stand.)
(2) Adjust the piano body so that it evenly aligns with the stand.
(3) Positioning the piano body on the stand, confirm that the 4 black screws can easily be inserted.
(4) Tighten the 4 screws securely.
(5) Securely tighten the 4 black screws that affix the cross bar.

6. Connect the pedal cord and power cord to the terminals.



With the ⇧ mark upwards, insert the plug fully.

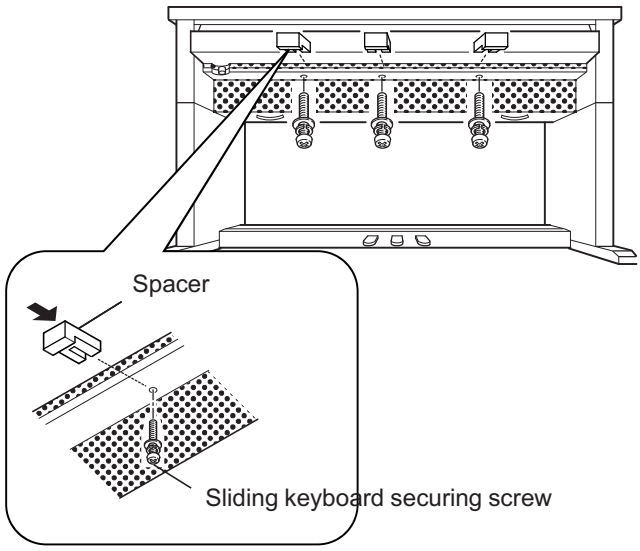
(1) Plug the pedal cord and power cord into the terminals on the rear of the piano.
(2) Remove the backing from the clamps and affix them as shown in the figure. Secure the pedal cord to the clamps.

■ Confirm: After assembling, check these points.

- Are any parts left over?
  → Check the assembly procedure again.
- Does the piano rattle when it is rocked?
  → Make sure all the screws are securely tightened.
- Is the power cord firmly inserted?
  → Check again.
- Is the plug of the pedal cord inserted as far into the connector terminal as it will go?
  → If it is not completely inserted, the sustain and other pedal functions may not work.
- When the piano has been moved or transported, retighten the screws securely.

■ After setting up

After assembling the instrument and positioning it in its intended place of use, remove the 3 gold screws and 3 spacers that secure the sliding keyboard.

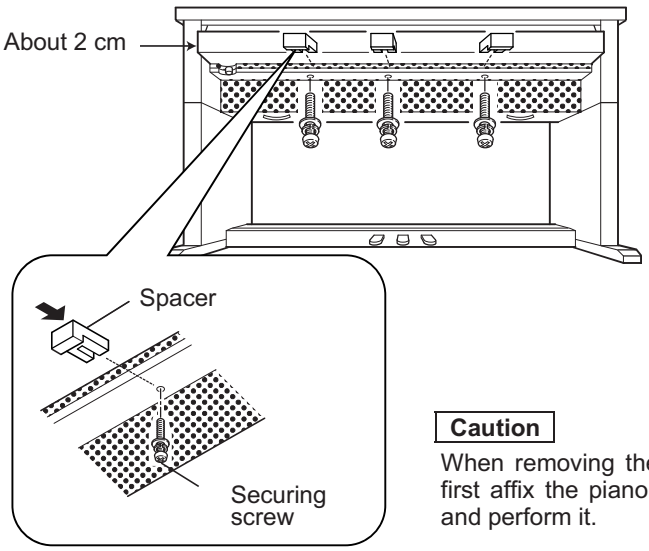


Note
Please keep the securing screws and spacers in a safe place for use in the event of a future move.

■ Caution when transporting this instrument

When transporting this instrument (during a move, for example), affix the special securing parts to the keyboard section.
At this time, do not completely stow the keyboard section inside the main unit, but allow it to protrude about 2 cm towards the front, affixing it by following the procedure below.

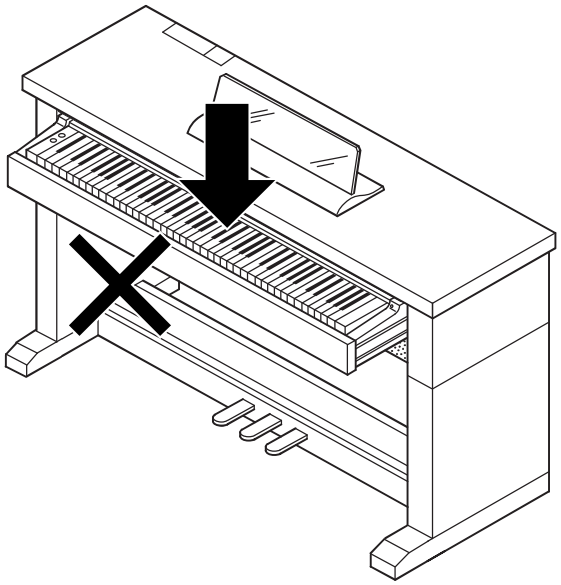
(1) Place each of the three spacers so that they will be positioned in the gap between the screw and the panel.
(2) Partly screw in the 3 securing screws, making sure that each of the spacers is lightly held in place.
(3) Securely tighten each screw.



Caution
When removing the securing screws, first affix the piano body to the stand and perform it.

■ Caution

Please do not sit on or hang from the keyboard section. (If a strong force is applied, there is a danger of its falling.)



Function		Transmitted	Recognized	Remarks
Basic	Default	—	1	
Channel	Changed	1–16	1–16	
Mode	Default	3	3	
	Messages	×	×	
	Altered	—	—	
Note		21-108	0–127	
Number	True voice	—	0–127*	
Velocity	Note ON	O	O	
	Note OFF	×(9nh: v=0)	×	
After	Key's	×	×	
Touch	Ch's	×	×	
Pitch Bend		×	×	
Control	64	O	O	sustain pedal
	66	O	O	sostenuto pedal
Change	67	O	O	soft pedal
	74	×	O	brilliance
Prog		O	O	8 built-in sounds arranged
Change	True #	—	1–128	in GM map
System Exclusive		O	O	
System	Song Pos	×	×	
	Song Sel	×	×	
Common	Tune	×	×	
System	Clock	×	×	
Real Time	Commands	×	×	start/stop, continue
Aux	Local ON/OFF	×	O	
	All Notes OFF	×	O	
Messages	Active Sense	O	O	
	Reset	×	×	
Notes		*Depends on the TRANSPOSE setting.		

Mode 1: OMNI ON, POLY **Mode 2:** OMNI ON, MONO O : Yes
Mode 3: OMNI OFF, POLY **Mode 4:** OMNI OFF, MONO × : No

1. **At places where special caution is required, the necessary safety precautions are clearly labeled or printed, for example, on the cabinet, or on the part concerned. Please follow these safety precautions, and also those listed in the Owner'sManual.**
2. **Parts which have a ⚠ ; mark in the circuit diagram or in the parts list are essential for safety. When replacing these parts, be sure to use onlythe specified parts.**
3. **Use the specified types for internal wiring (double-insulated wiring, etc.).**
4. **When replacing parts on the AC primary side (power transformer, electric switch, electrical cord, noise-prevention condenser, etc.), wind the lead wire and secure it by soldering.**
5. **Do not let the wiring come into contact with heat-emitting devices (fuse resistor, radiator plate, etc.).**
6. **When replacing the wiring, make sure that it is not in contact with the unfinished or rough edge of a part.**
7. **When replacing the power cord (except for the plug-in type), tug it from various directions to confirm that it does not slip out of place.**
8. **Spacing**
   If soldering was done on the AC primary circuit, confirm that the interval between the soldered terminals or between the terminal and surrounding metallic parts is at least the minimum required (between the primary circuit and the chassis: atleast 6.5 mm; between primary circuit terminals: at least 4.0 mm; between primary circuit terminals and secondary circuit terminals: at least 6.5 mm.).

2. Safety Precaution

2.1. Safety Precaution

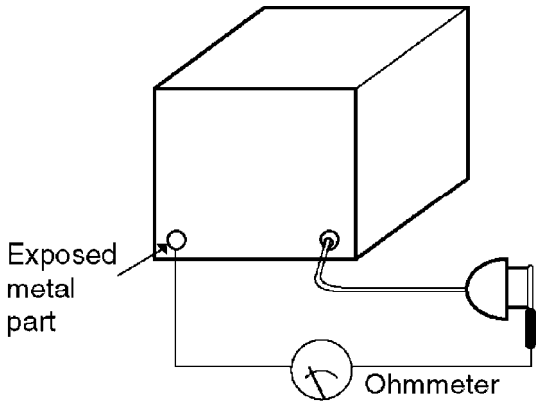
1. **Before servicing, unplug the power cord to prevent an electric shock.**
2. **When replacing parts, use only the manufacturer’s recommended components for safety.**

3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

2.2. Insulation Resistance Test

1. Unplug the power cord and short the prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with an ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screw heads, connectors, control shafts, handle brackets, etc. Measurements should range from 4 MOhm to infinity for allexposed parts. (refer to Fig.1)

Fig.1

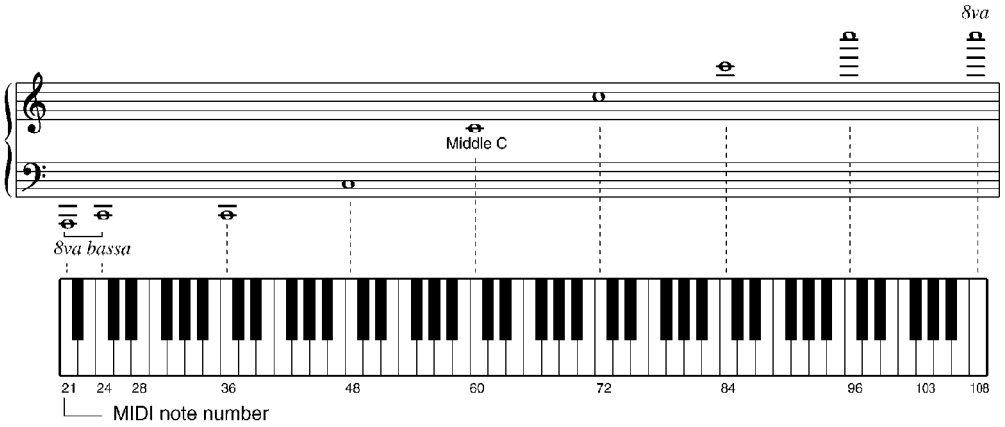


Resistance = 4MΩ to ∞

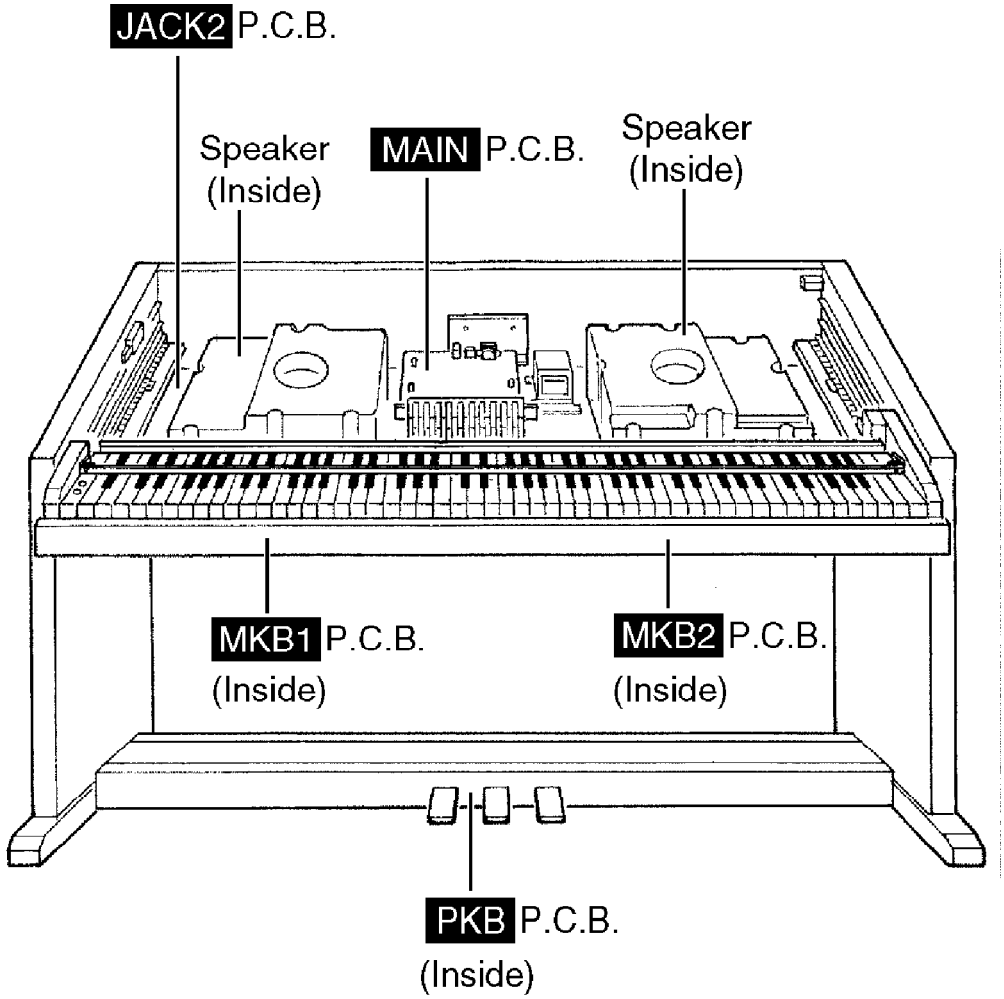
3. Assembly

4. MIDI Implementation Chart

5. Keyboard Ranges and MIDI Note Number



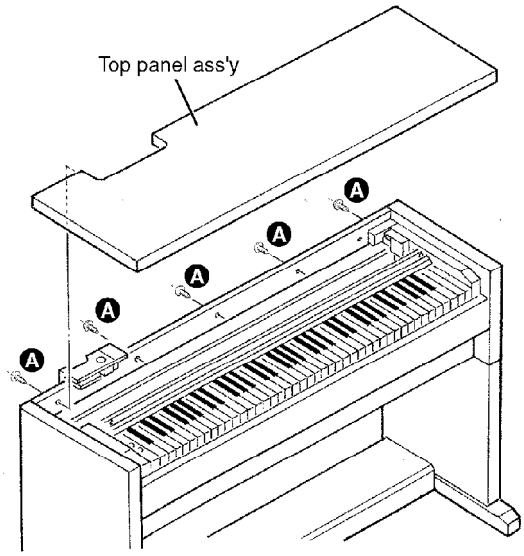
6. Parts Location



7. Disassembly Instructions

7.1. Removing the top panel ass'y

Fig.2



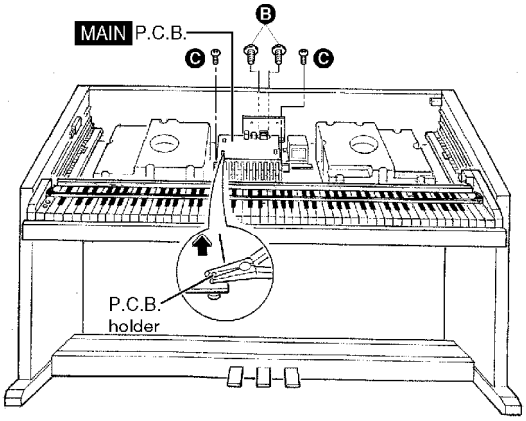
(Step1)

Remove the screws Ⓐ×5, lift up the top panel ass'y (refer to Fig.2).

7.2. Removing the MAIN P.C.B.

- Follow the item 7.1.

Fig.3



(Step1)

Remove the screws Ⓑ×2 and Ⓒ×2 (refer to Fig.3).

(Step2)

Pull out all wires.

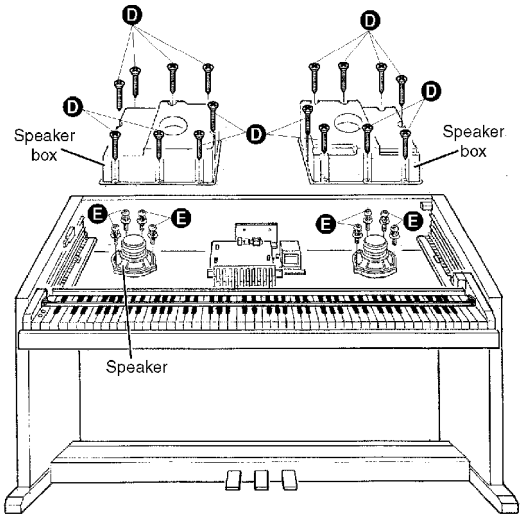
(Step3)

Use the plier, pick the three P.C.B. holders and lift up the MAIN P.C.B. (refer to Fig.3).

7.3. Removing the speaker boxes and speakers

- Follow the item 7.1.

Fig.4



7.3.1. Speaker boxes

(Step1)

Remove the screws Ⓓ×16 (refer to Fig.4).

7.3.2. Speakers

- Follow the item 7.3.1.

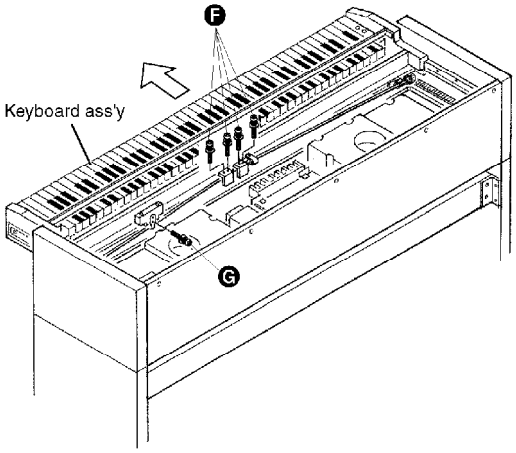
(Step2)

Remove the screws Ⓔ×8 (refer to Fig.4).

7.4. Removing the keyboard ass'y

- Follow the item 7.1.

Fig.5



(Step1)

Remove the screws Ⓕ×4 and Ⓖ×1 (refer to Fig.5).

(Step2)

Pull out the keyborad ass'y for direction of allow (refer to Fig.5).

Note)

- Do not bend the shaft.

- Be careful not to drop the keyboard ass'y.

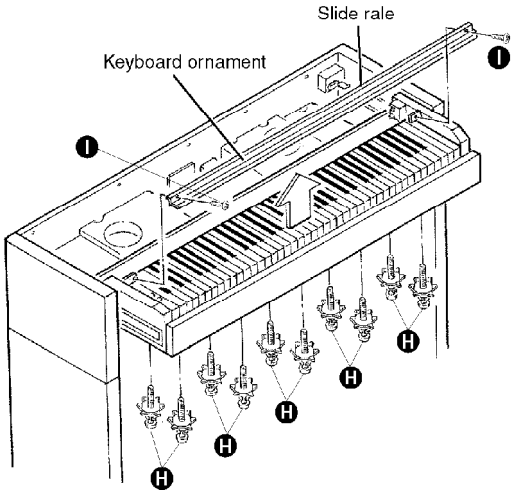
7.4.1. Assembly the keyboard ass'y

- When assemble the keyboard ass'y, slide the angle in the each sides slide rales to the back, push the keyboard ass'y into the slide rales for parallel.

7.5. Removing the keyboard chassis

- Follow the item 7.1.

Fig.6



(Step1)

Remove the screws I ×2, remove the keyboard ornament (refer to Fig.6).

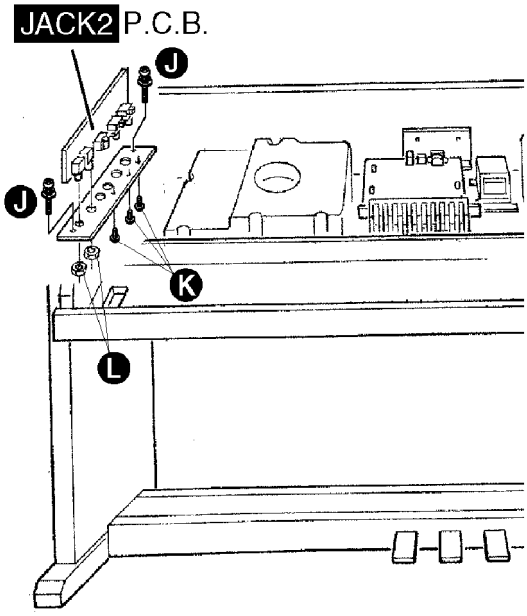
(Step2)

Remove the screws I ×10, lift up the keyboard chassis in the direction of allow (refer to Fig.6).

7.6. Removing the JACK2 P.C.B.

- Follow the item 7.5.

Fig.7



(Step1)

Remove the screws J ×2 (refer to Fig.7).

(Step2)

Remove the screws Ⓚ×3 and nuts Ⓛ×2, remove the JACK2 P.C.B. (refer to Fig.7).

7.7. Disassembly and assembly of key(s)

- Follow the item 7.5.

7.7.1. Disassembly (white keys)

(Step1)

Insert the thin solid board between white key and black key, push the claw (refer to Fig.8).

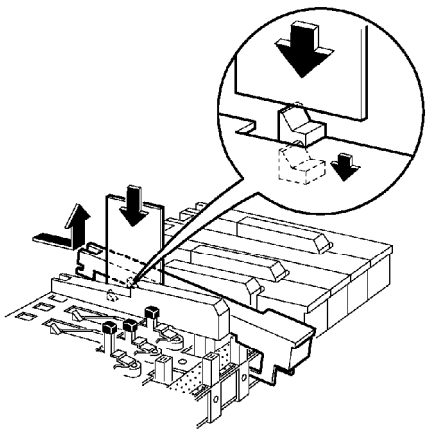
(Step2)

While pressing slightly the front of the key, push the rear of the key forward to disengage the key claw from the chassis (refer to Fig.8).

(Step3)

Lift the key and remove it.

Fig.8



7.7.2. Disassembly (black keys)

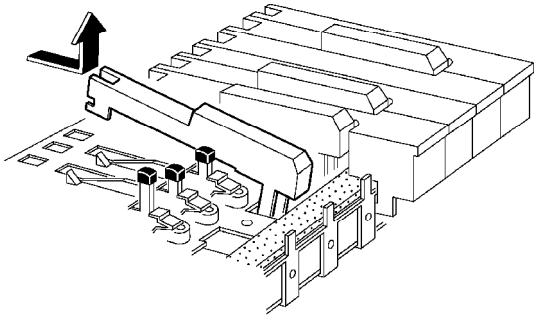
(Step1)

While pressing slightly the front of the key, push the rear of the key forward to disengage the key claw from the chassis (refer to Fig.9)

(Step2)

Lift the key and remove it.

Fig.9



7.7.3. Assembly (both white and black keys)

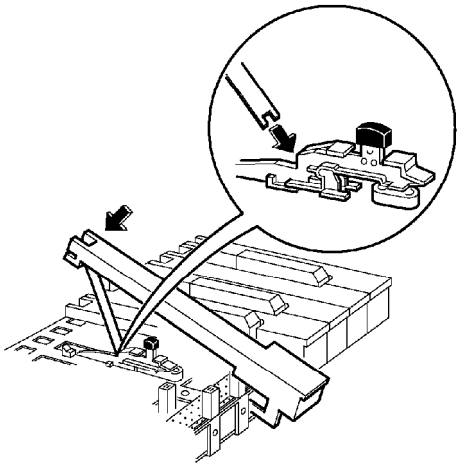
(Step1)
Insert the front part of the key into the chassis.

(Step2)
Insert the plate spring into the hammer notch (refer to Fig.10).

(Step3)
While slowly lowering the key into the chassis, insert the plate spring into the notch at the rear of the key (refer to Fig.10).

(Step4)
Carefully insert the key into the opening in the chassis and slide the key towards the rear to lock it in place (refer to Fig.10).

Fig.10

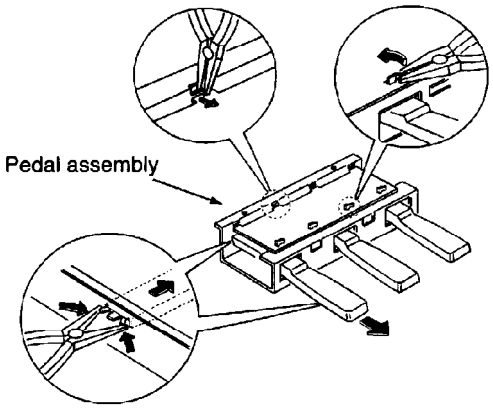


7.8. Disassembly of the pedal assembly

(Step1)
Remove the pedal assembly from the pedal box.

(Step2)
Disassemble the pedal assembly (refer to Fig.11).

Fig.11



8. Precautions before Servicing

8.1. Precautions for measuring of the output waveforms

1. **The waveform was measured with a "National Digital Storage Oscilloscope VP-5730A". Therefore the waveforms of musical tone signals shown may differ somewhat due to the difference in the timing of triggering.**
2. **Since the 1/10 test probe is used, the indicated voltage value on the bottom part of each waveform illustration is 1/10 of the actual value (e.g. 0.2 V/cm should be 2.0 V/cm).**
3. **To measure the waveforms, first set this unit to the service diagnostic mode (refer to "WAVE ROM test"). The WAVE ROM output will then be output as a sine wave to facilitate the servicing check.**

8.2. Important safety notice

- Components identified by a ⚠ mark have special characteristics impotant for safety.
- When replacing any of these components, use only manufacture's specified parts.

8.3. Symbolic Marks

The symbolic marks for resistors and capacitors which used in this circuits are classified as following Table-1 and Table-2 .

8.3.1. RESISTORS

- Resistors without symbolic mark are FIXED CARBON FILM RESISTORS (ERD-type).

- All resistors are 1/4 WATT, ±5 % TOLERANCE unless otherwise designated in schematic diagrams.

Table-1

SYMBOL	SPECIFICATION
	Fixed Carbon Film Resistors "FLAME-PROOF" (ERD—F—type)
	Fixed Wire Wound Resistors "FLAME-PROOF" (ERF—type)
	Fixed Metal Oxide Film Resistors "FLAME-PROOF" (ERG—type)
	Fixed Metal Film Resistors "FLAME-PROOF" (ERX—type)
	Fixed Metal Film Resistors (Precision and High Stability) (ERO—type)
	Fuse Type Fixed Metal Oxide Film Resistors "FLAME-PROOF" (ERQ—type)
	Fuse Type Fixed Carbon Film Resistors "FLAME-PROOF" (ERD2FC—type)

8.3.2. CAPACITORS

- Capacitors without symbolic mark are POLYESTER CAPACITORS. (ECQM-type, ECQG-type, ±10% Tolerance)

- Polarized capacitors without symbolic mark are Aluminum Electrolytic Capapcitors. (ECEA-type, ±20% Tolerance)

Table-2

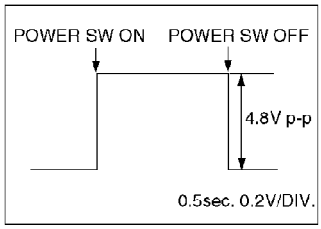
SYMBOL	SPECIFICATION	TYPE
	Non-Polarized Electrolytic Capacitors	ECEA_KN_type
	Non-Polarized Electrolytic (for Network system)	ECEA_Y_type
	Tantalum Solid Electrolytic Capacitors	ECS_type
	Metalized Plastic Film Capacitors (TF Series)	ECQV_type
	Temperature Compensating Ceramic Capacitors	ECC_type
	High-Dielecytric Constant Ceramic Capacitors	ECK_type ECR_type
	Axial Lead Ceramic Capacitors	ECB_type
	Metalized Polyester Film Capacitors for Across the Line	ECQ_EW_type
	Aluminum Electrolytic Capacitors for Smoothing Circuit	ECES_type
	Multilayer Ceramic Chip Capacitors	ECUV_type

9. Measuring Condition

Check point ❷-⓬ (Refer to "11 Printed Circuit Board Diagram".)
Set to the self-diagnostic mode followings.

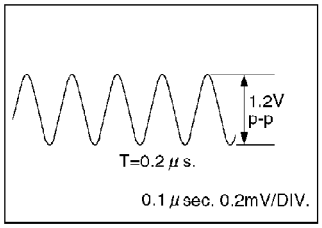
- While pressing two E keys (①) simultaneousuly, turn on the power switch.
- Main Volume ..... MAX
- Keyboard ..... A1(②)

❶ RESET

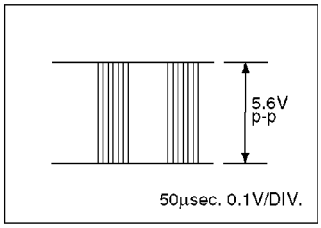


• Power SW ..... ON → OFF

❷ TG CLOCK



❸



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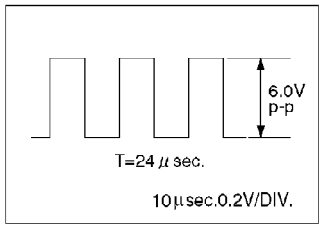
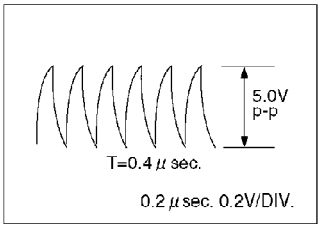
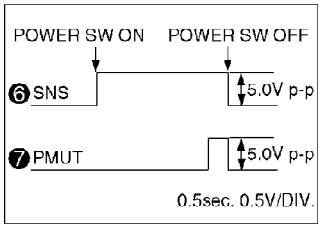


❺

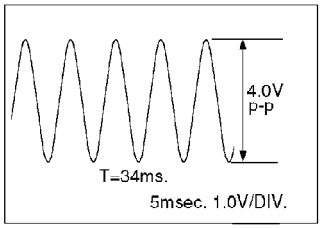


❻ SNS, ❼ PMUT

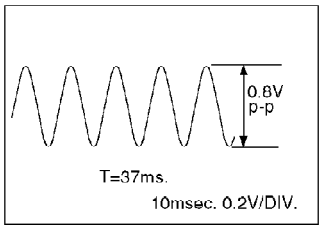


• Power SW ..... ON → OFF

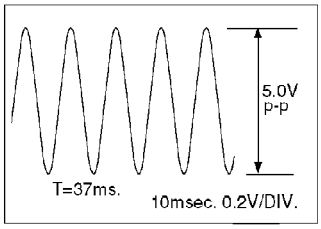
❽ HPS



❾ SUML, ❿ SUMR



⓫ SPL, ⓬ SPR



10. Schematic Diagram

11. Printed Circuit Board Diagram

12. Block Diagram

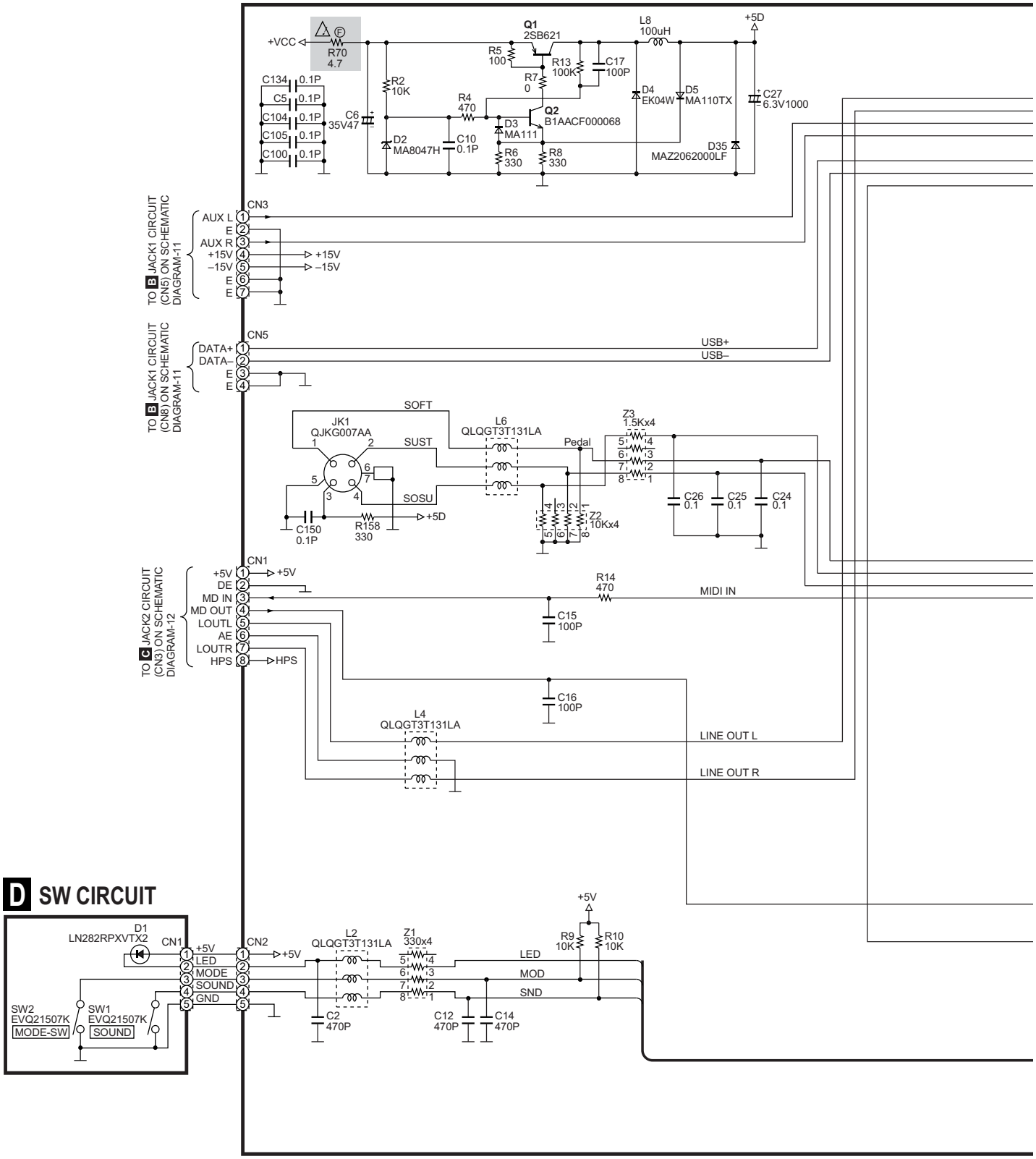
13. Wiring Connection Diagram

14. Replacement Parts List

Notes:
***Important safety notice:**
Components identified by ⚠ mark have special characteristics important for safety.

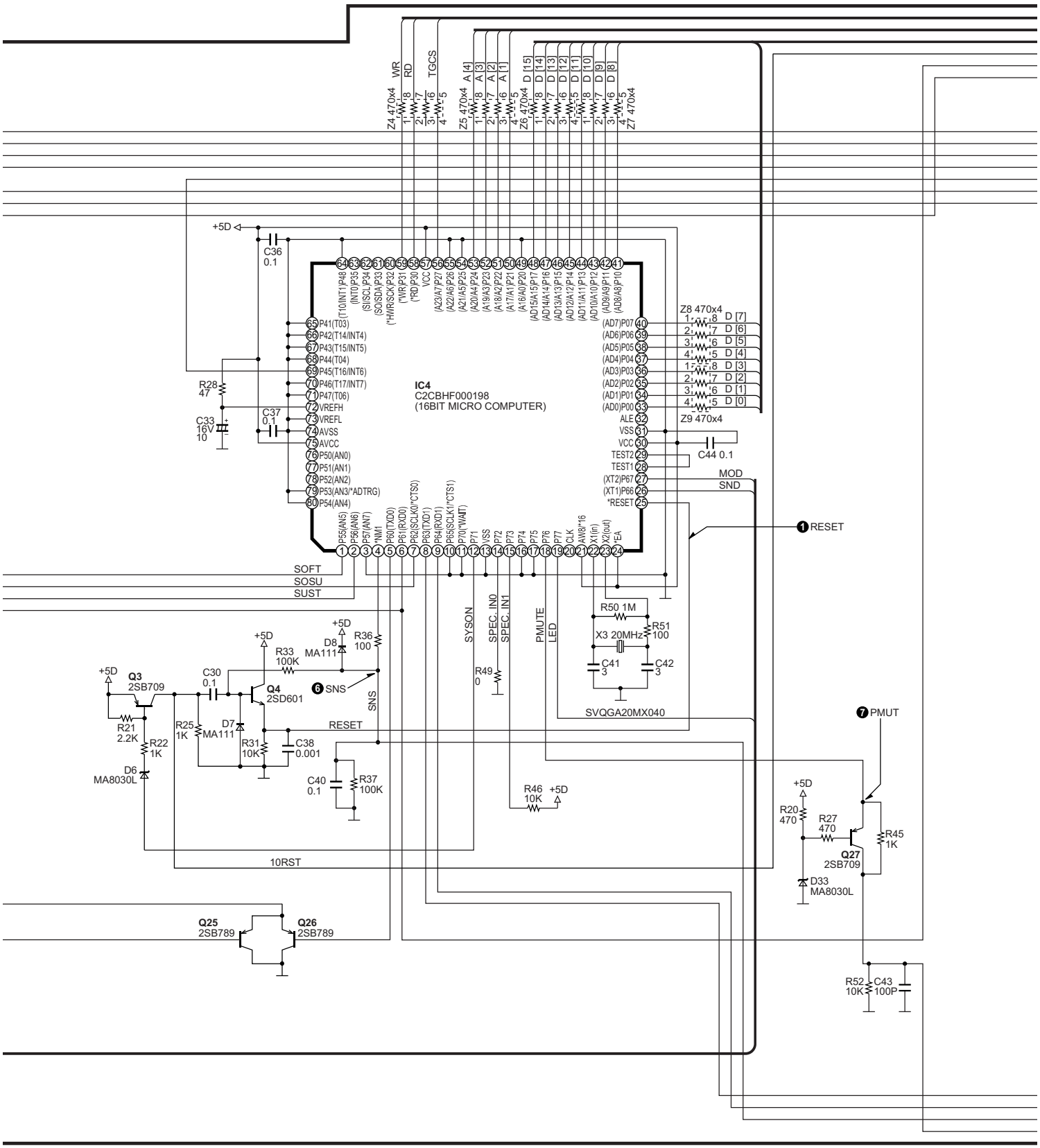
SCHEMATIC DIAGRAM-1

NOTE:
The number which noted at the connectors on the schematic diagram as "SCHEMATIC DIAGRAM-1"or "SCHEMATIC DIAGRAM-2" indicates the schematic diagram serial number located on the left corner in the schematic diagram.

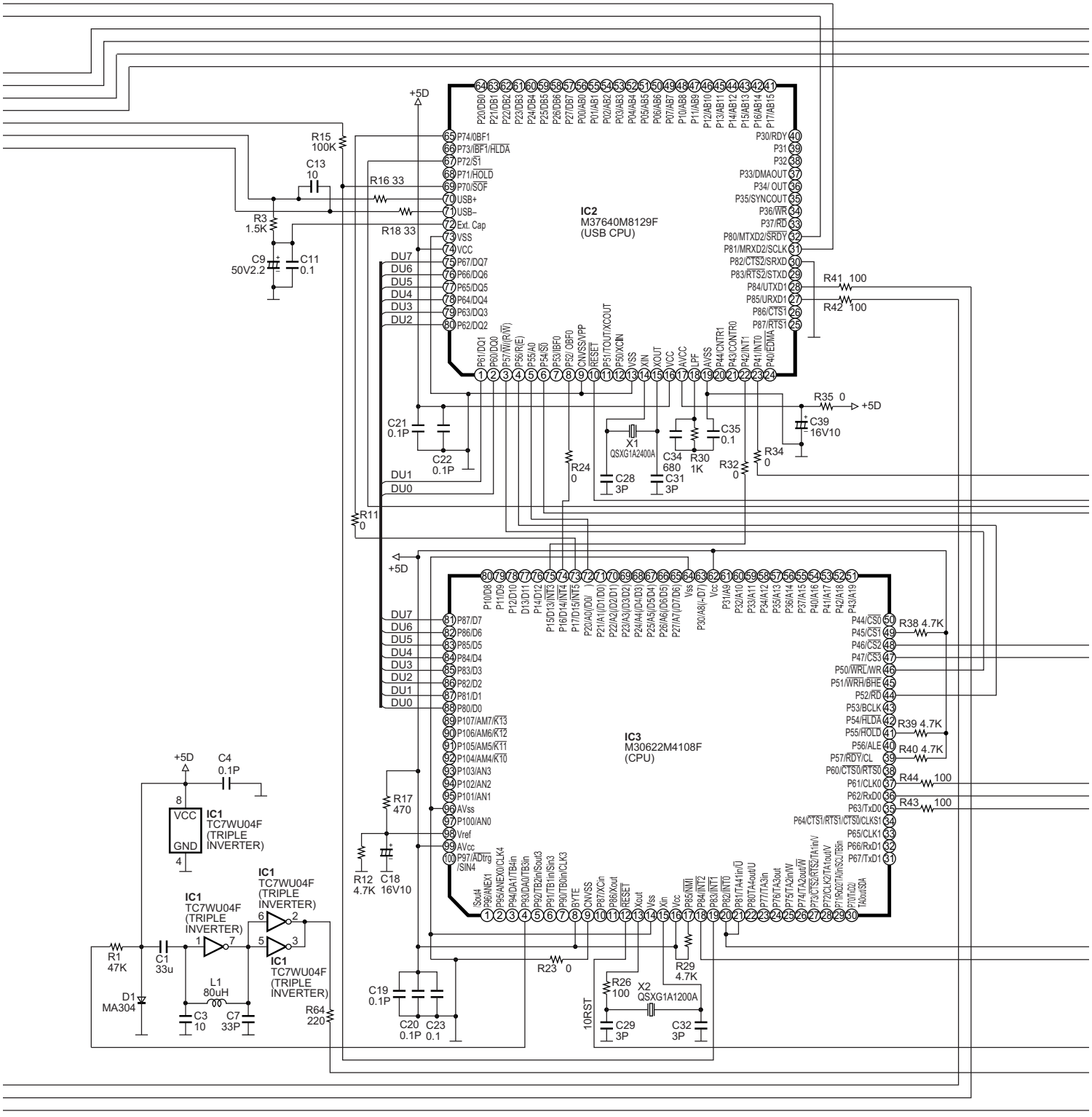


SX-NP10 MAIN, SW SCHEMATIC DIAGRAM

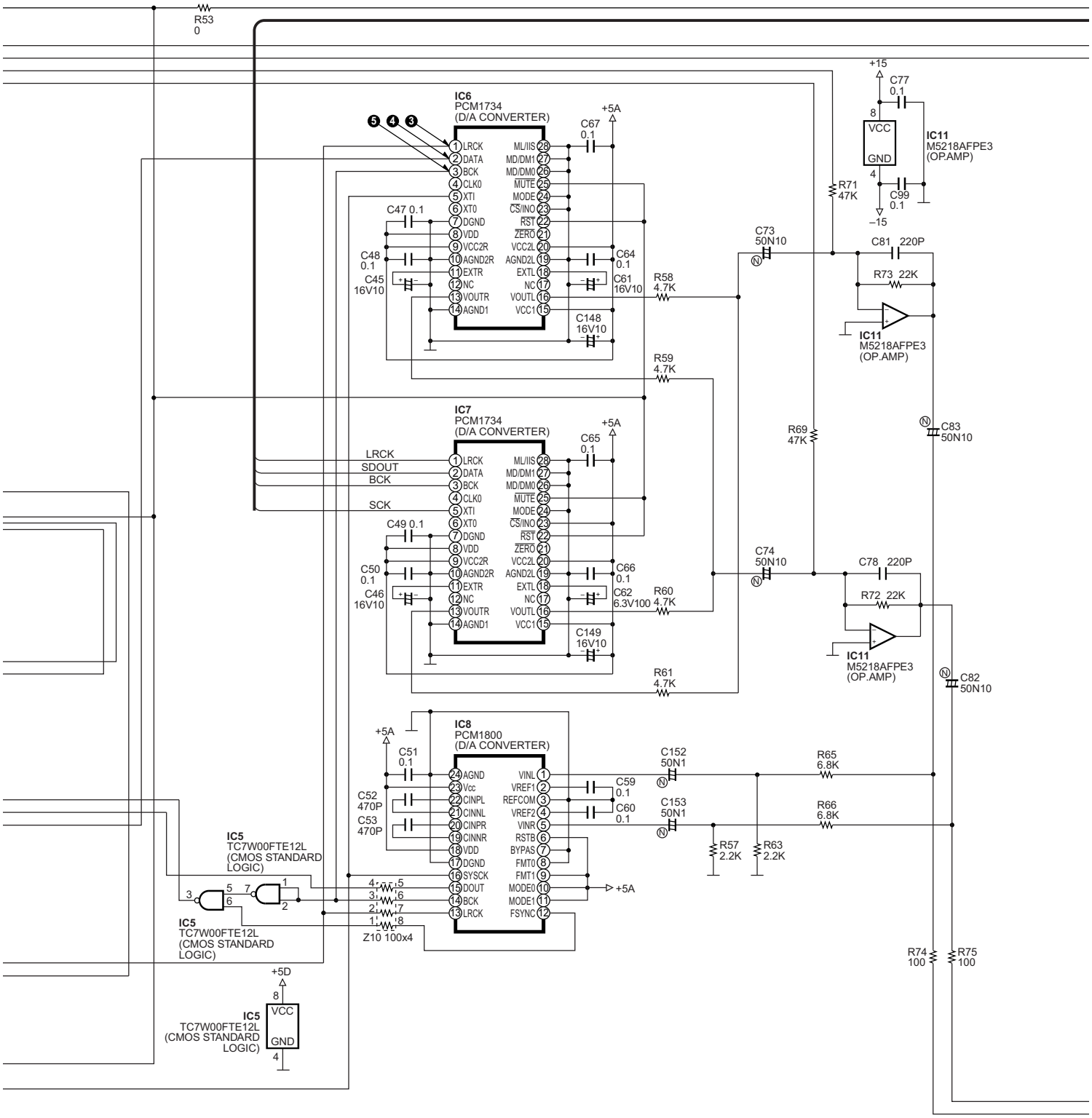
SCHEMATIC DIAGRAM-2



SCHEMATIC DIAGRAM-3

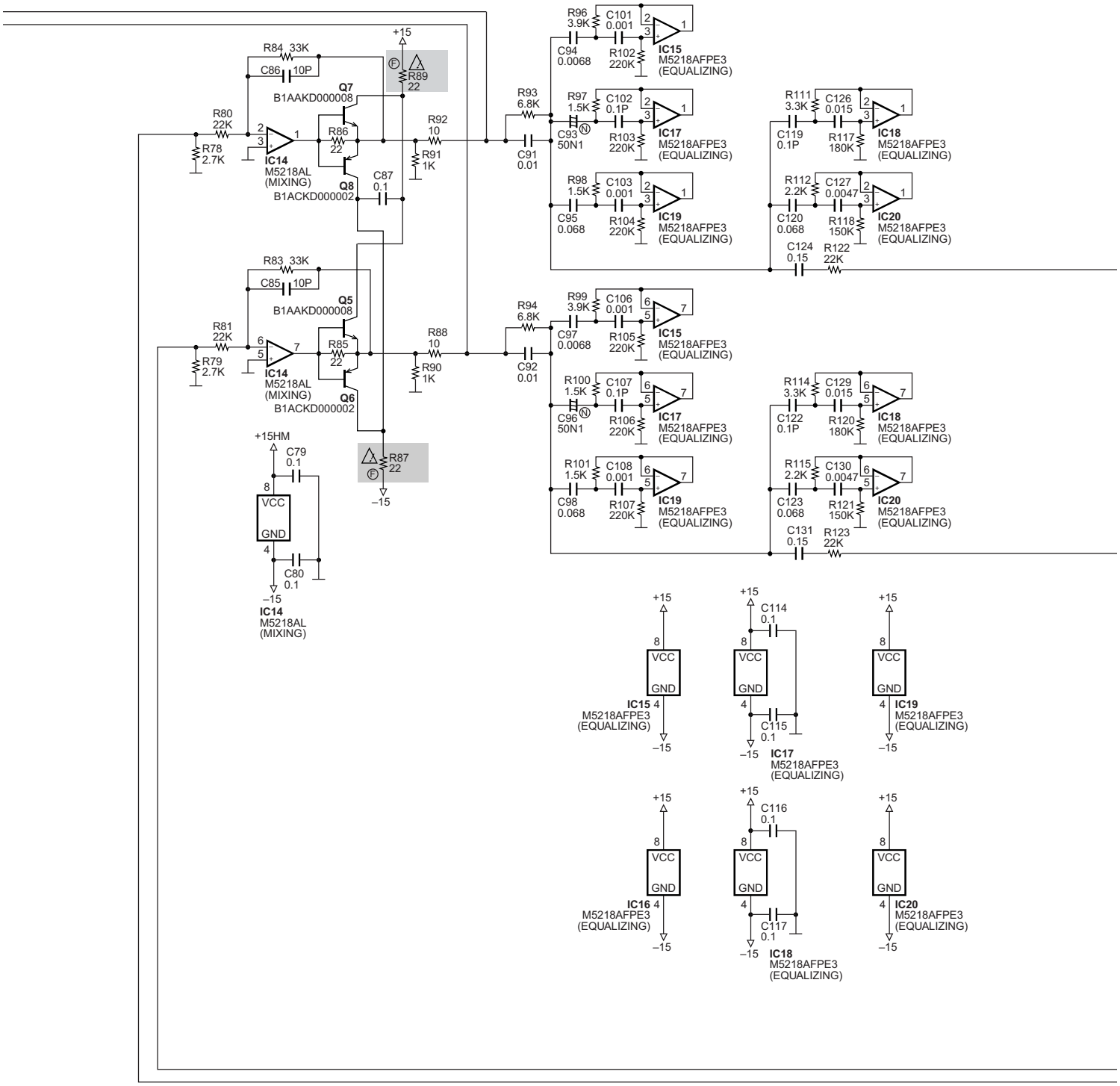


SCHEMATIC DIAGRAM-4

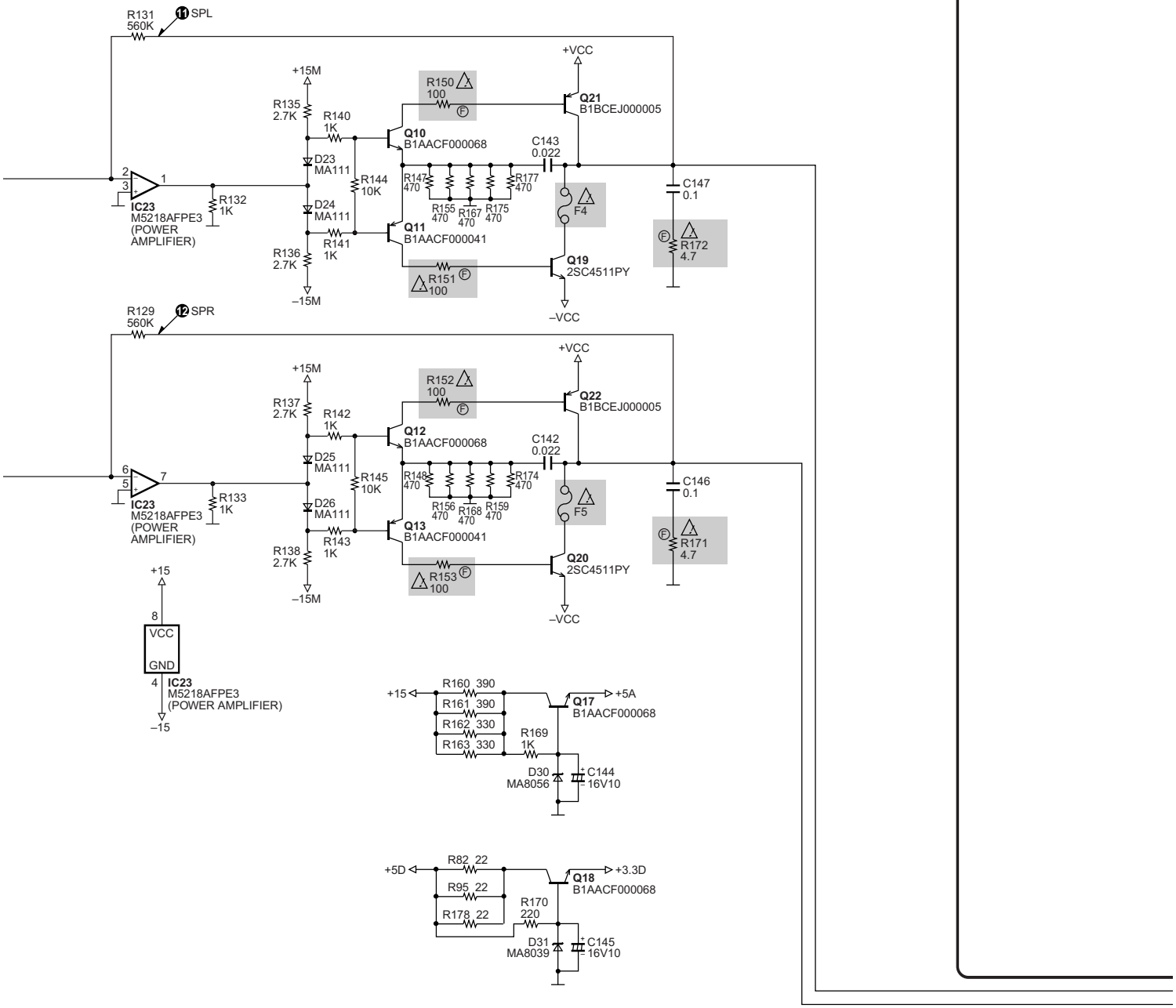


SX-NP10 MAIN SCHEMATIC DIAGRAM

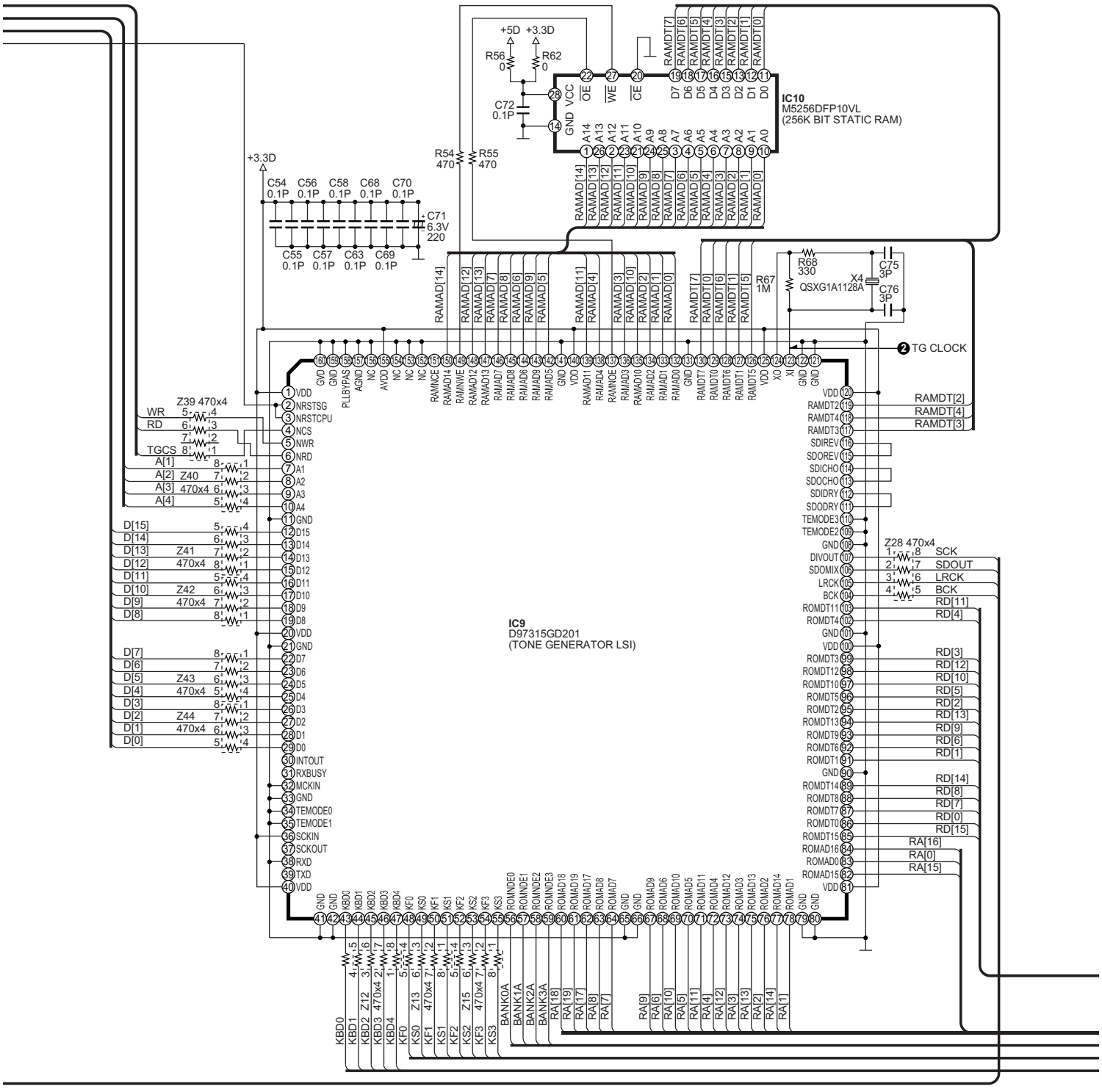
SCHEMATIC DIAGRAM-5



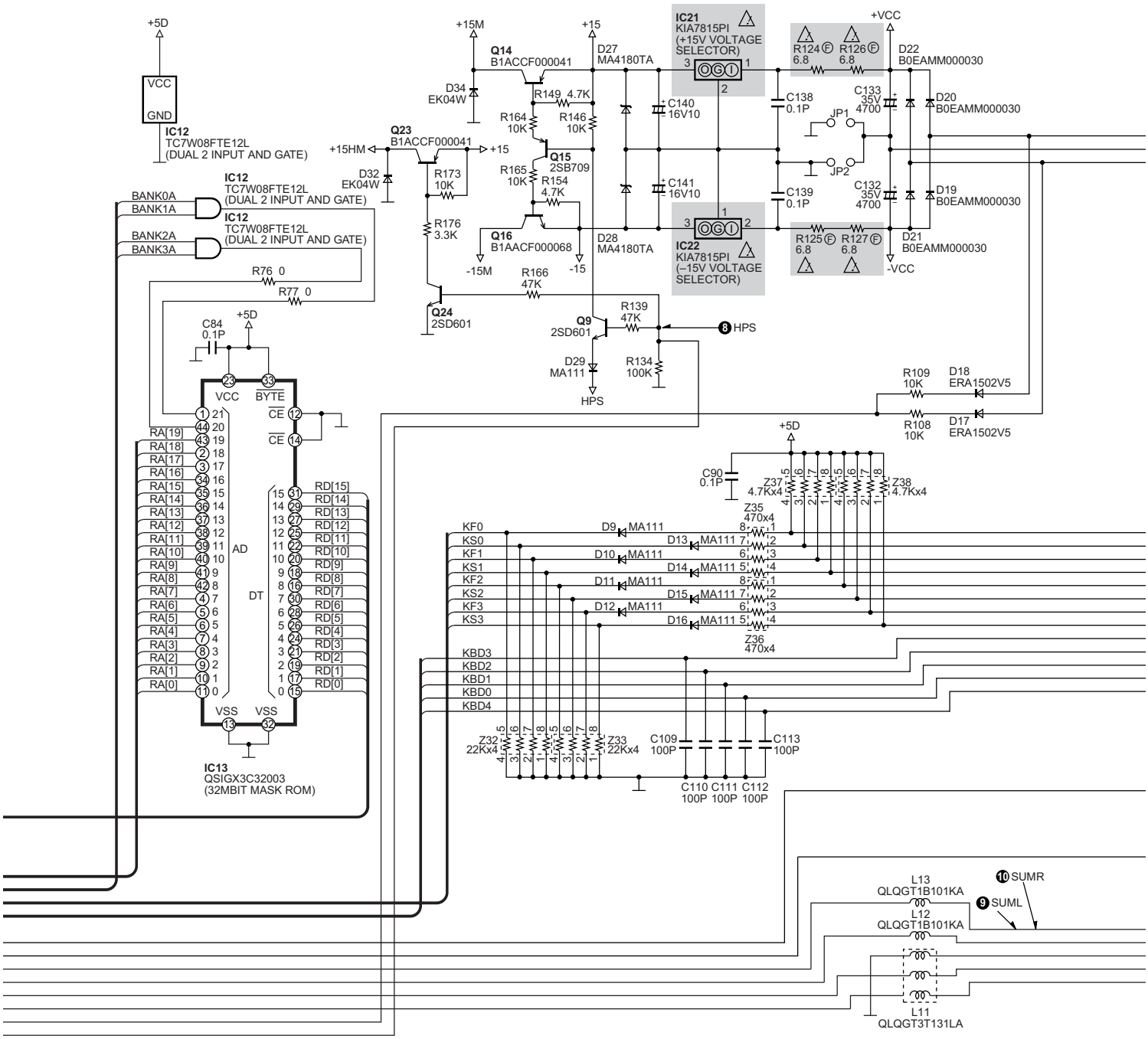
SCHEMATIC DIAGRAM-6



SCHEMATIC DIAGRAM-7

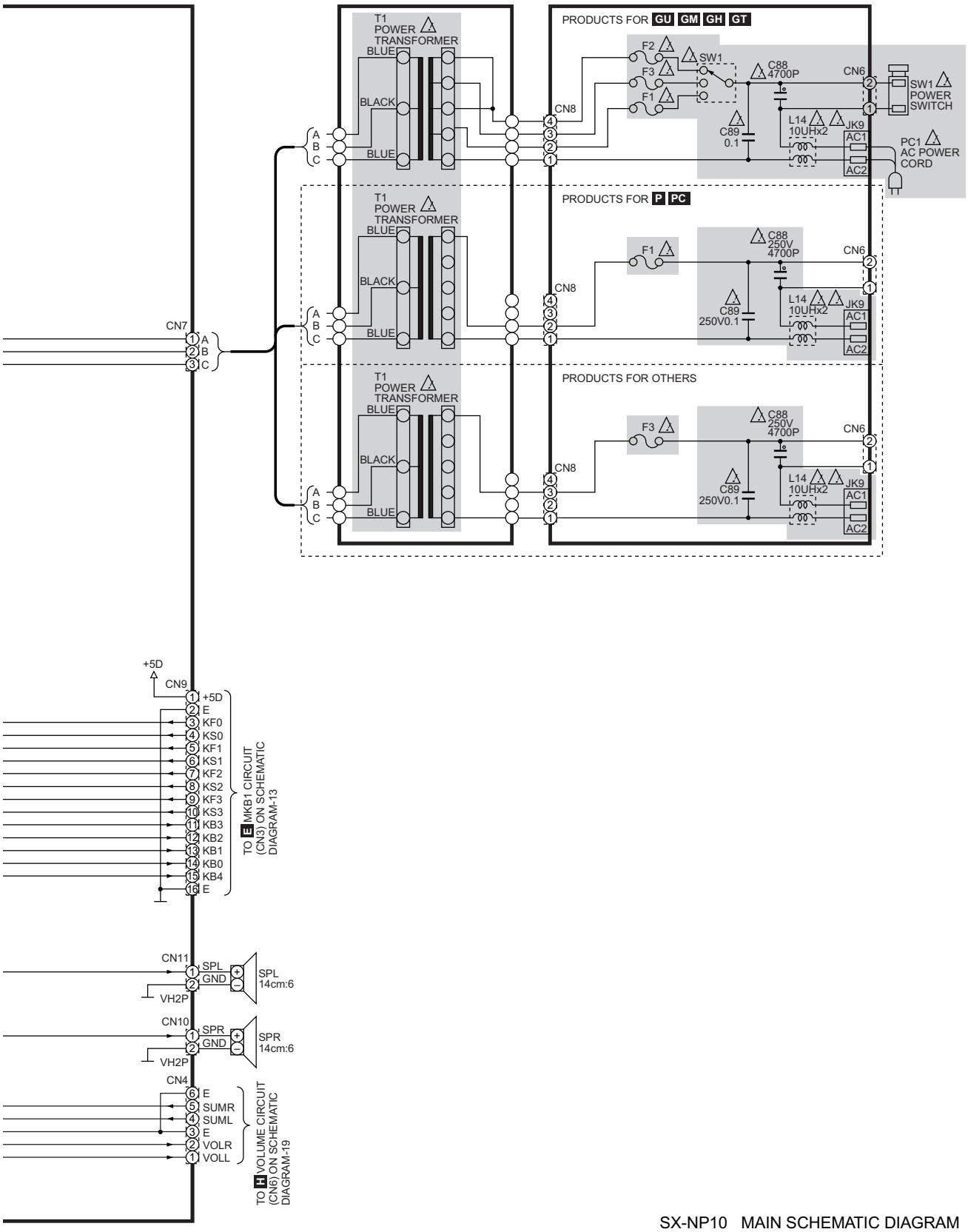


SCHEMATIC DIAGRAM-8



SX-NP10 MAIN SCHEMATIC DIAGRAM

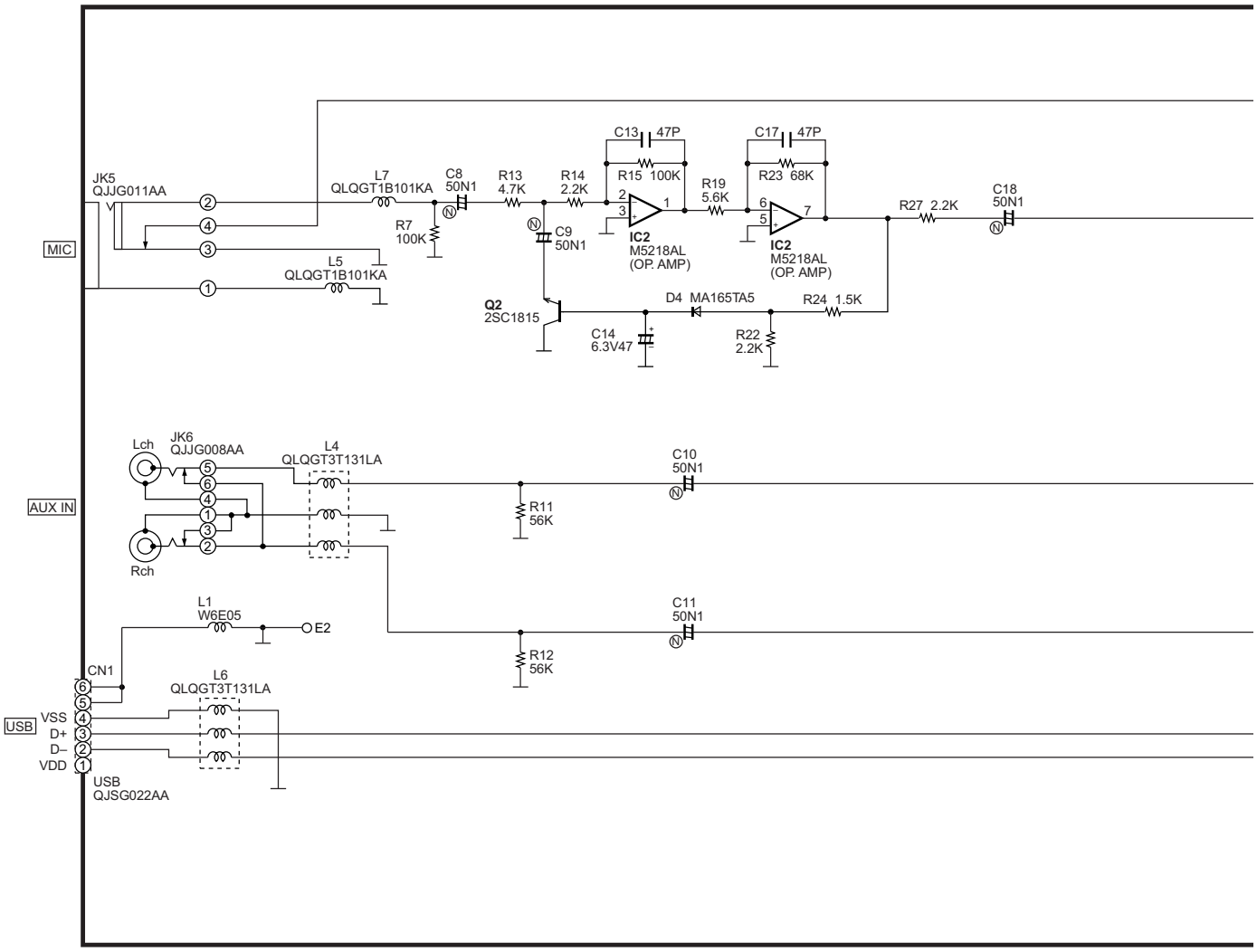
SCHEMATIC DIAGRAM-9



SX-NP10 MAIN SCHEMATIC DIAGRAM

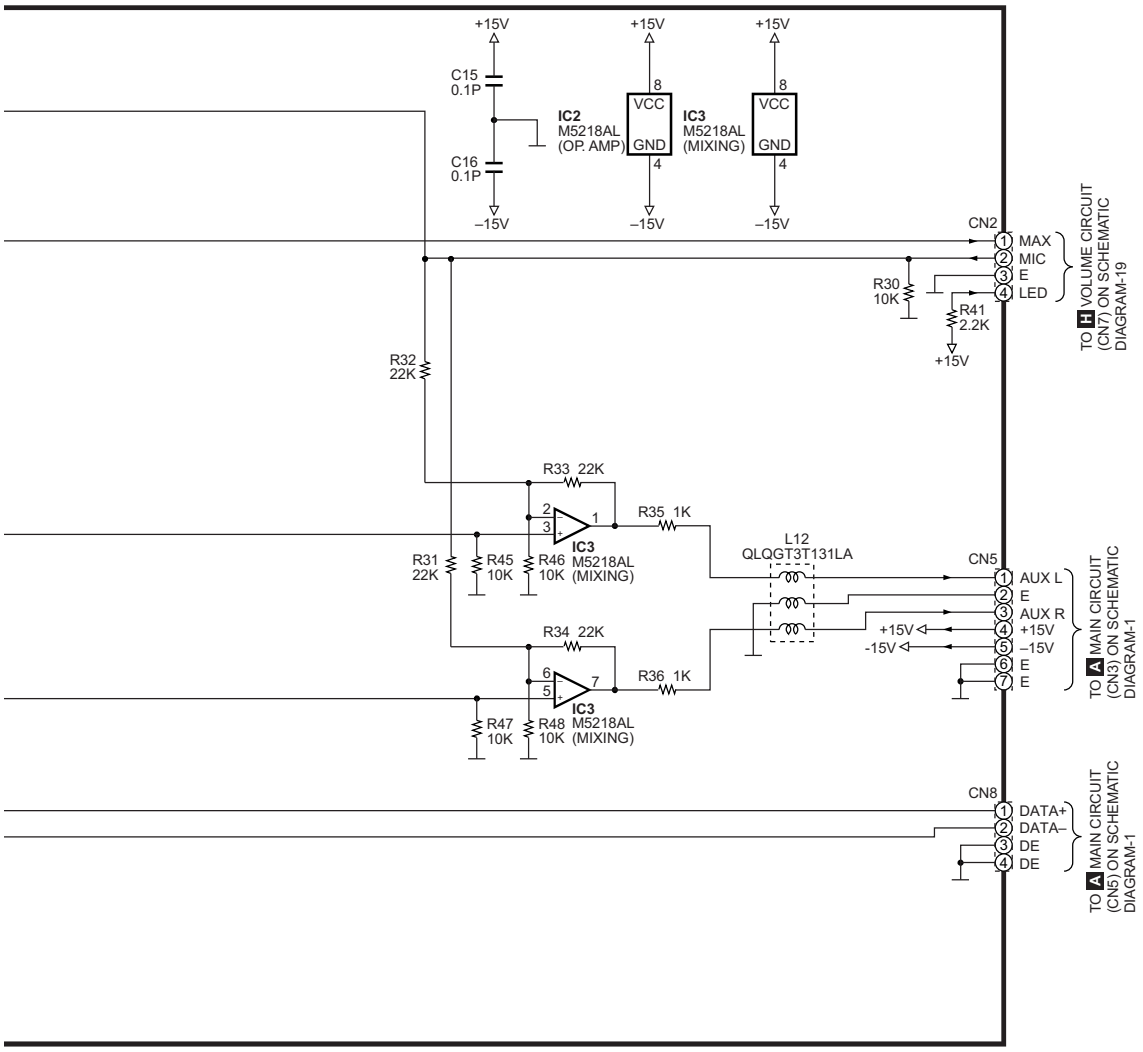
SCHEMATIC DIAGRAM-10

B JACK 1 CIRCUIT



SX-NP10
JACK1 SCHEMATIC DIAGRAM

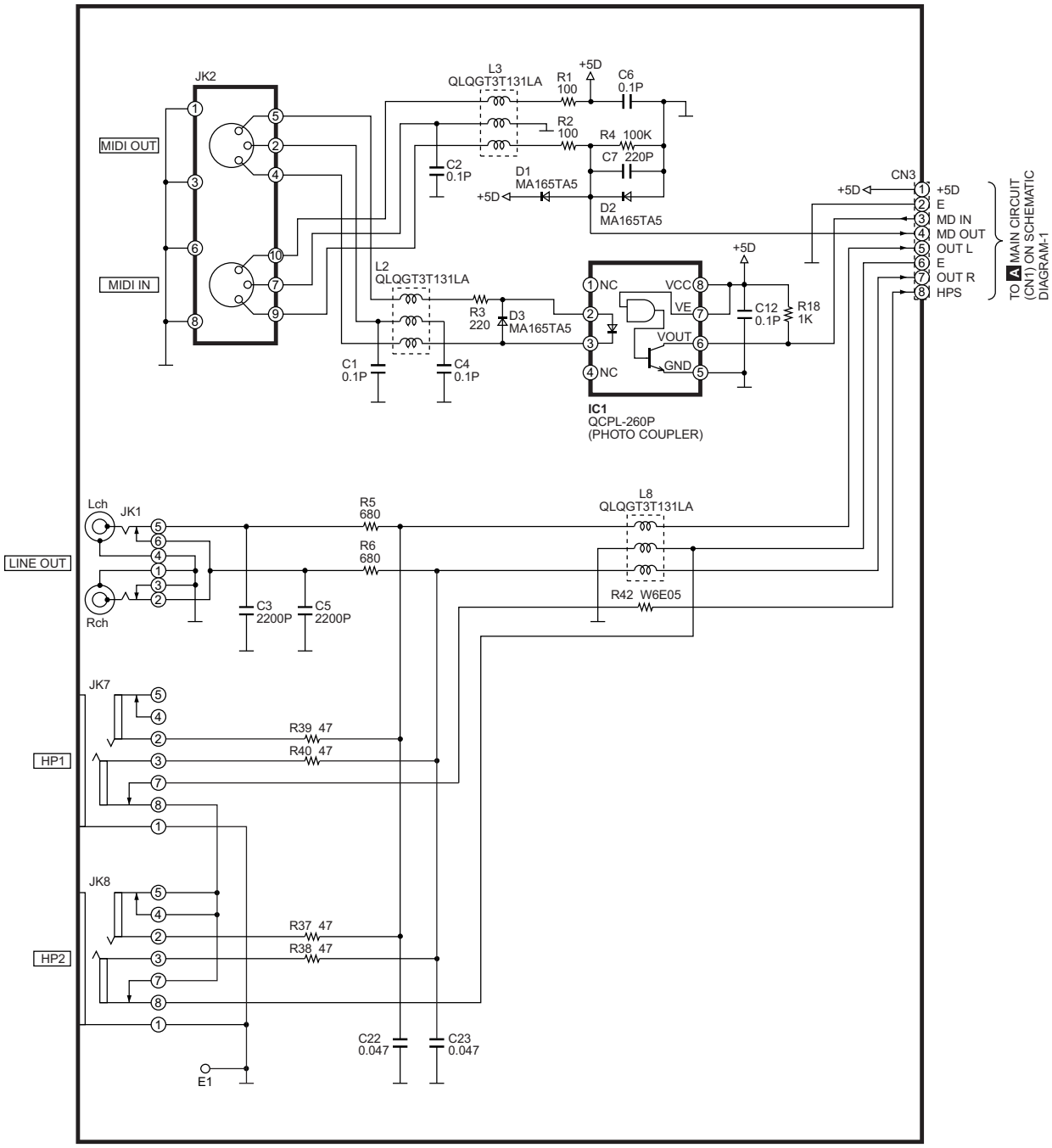
SCHEMATIC DIAGRAM-11



SX-NP10
JACK1 SCHEMATIC DIAGRAM

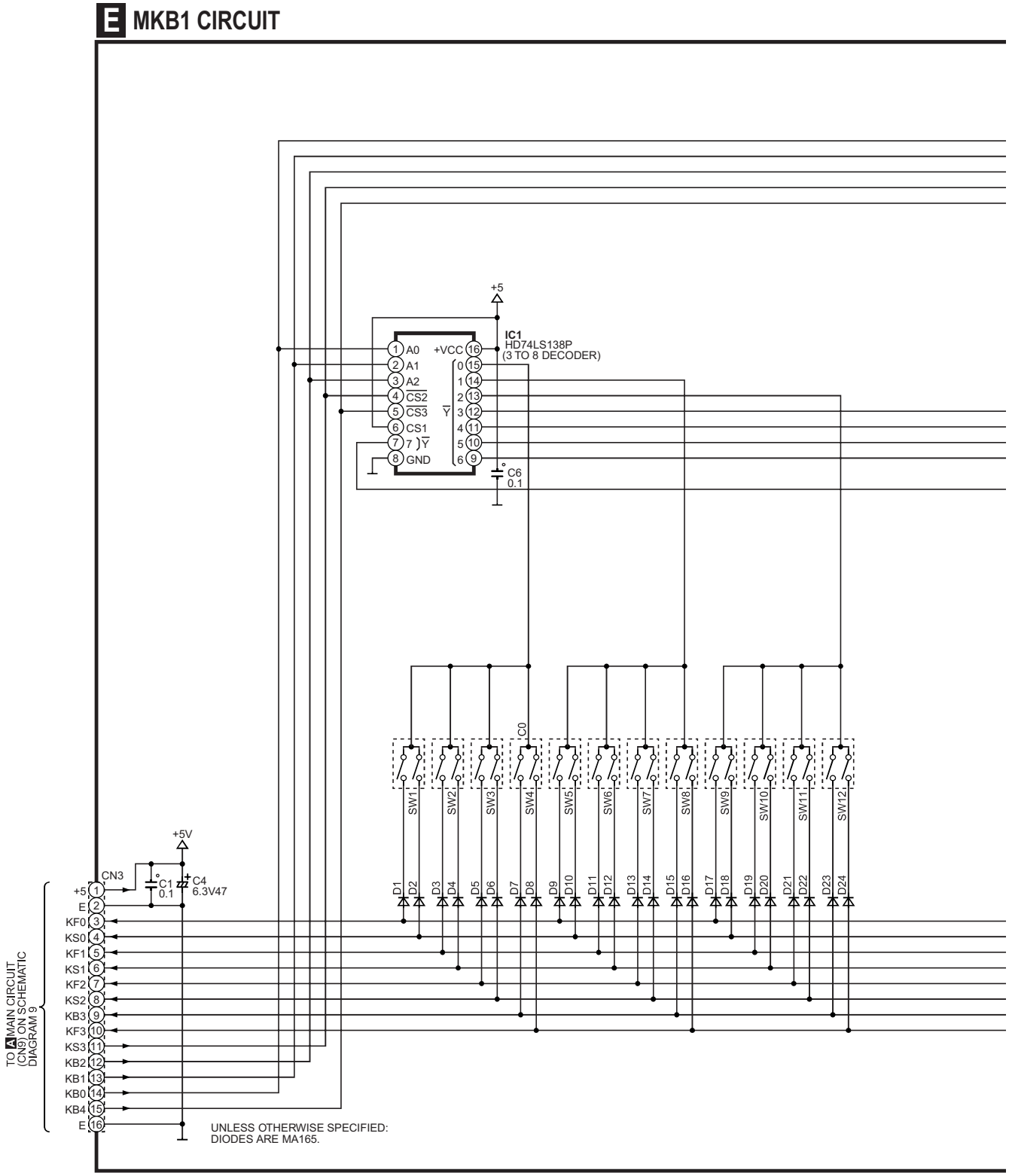
SCHEMATIC DIAGRAM-12

C JACK 2 CIRCUIT



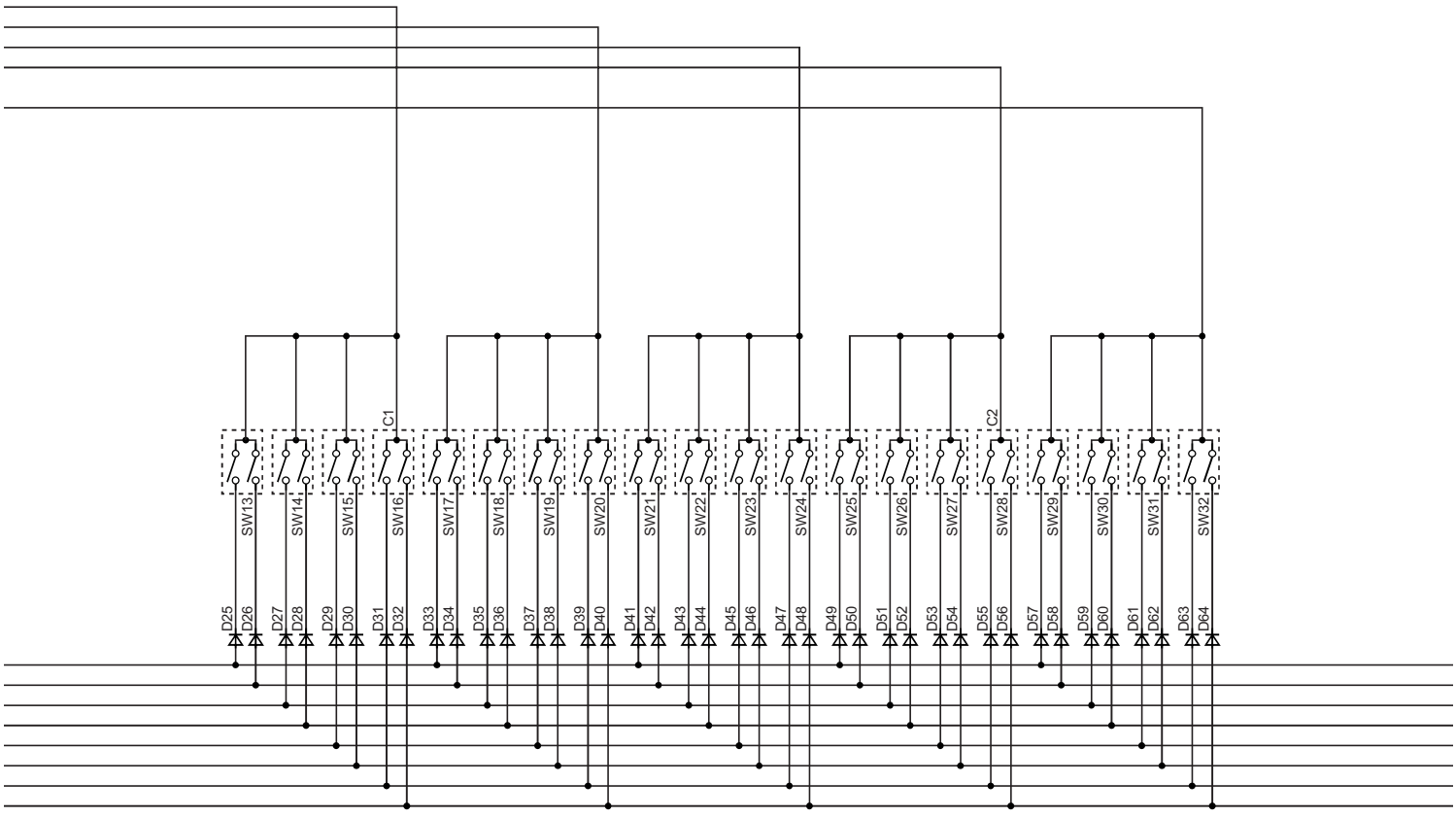
SX-NP10
JACK2 SCHEMATIC DIAGRAM

SCHEMATIC DIAGRAM-13

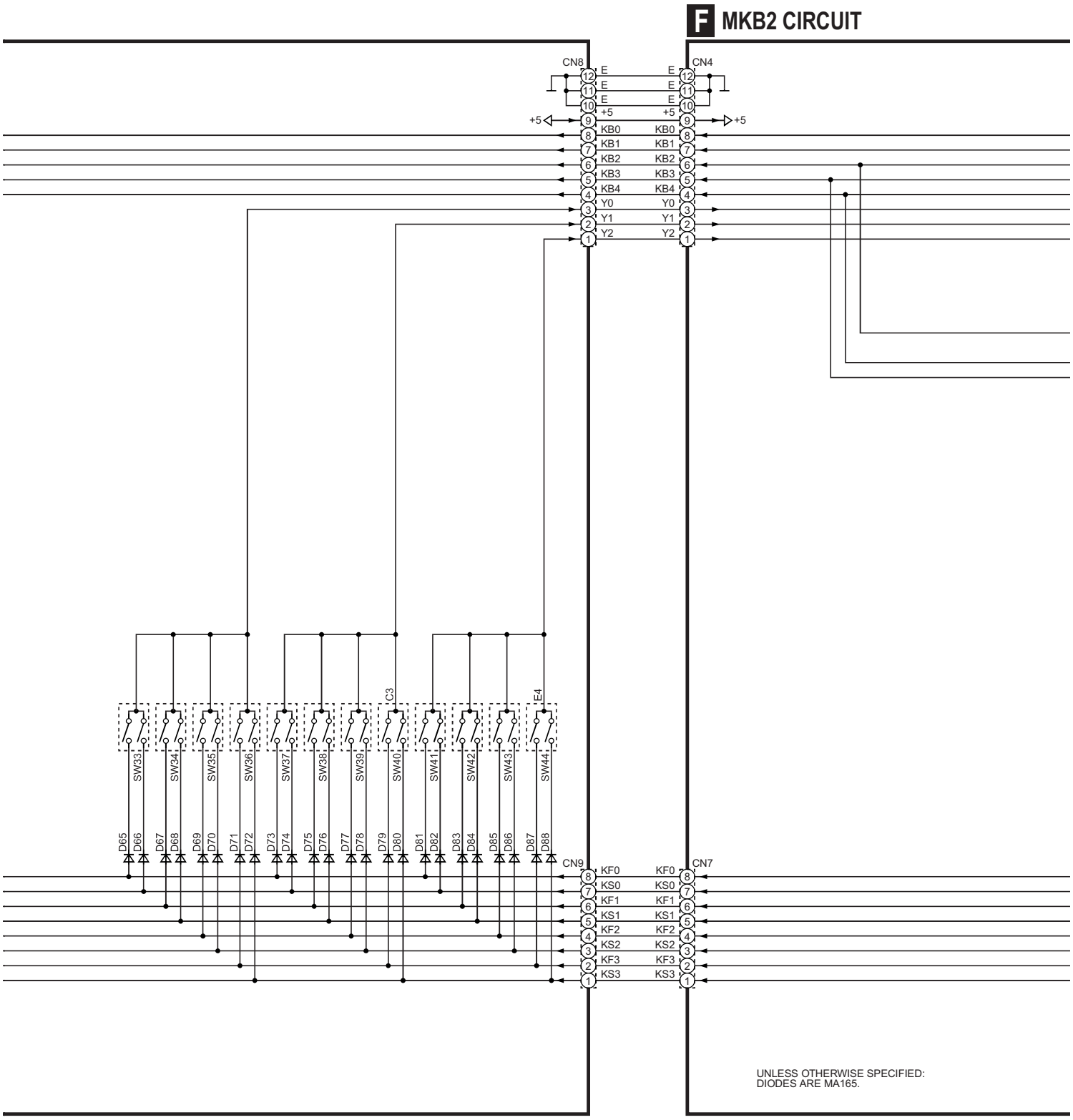


SX-NP10
MKB1 SCHEMATIC DIAGRAM

SCHEMATIC DIAGRAM-14

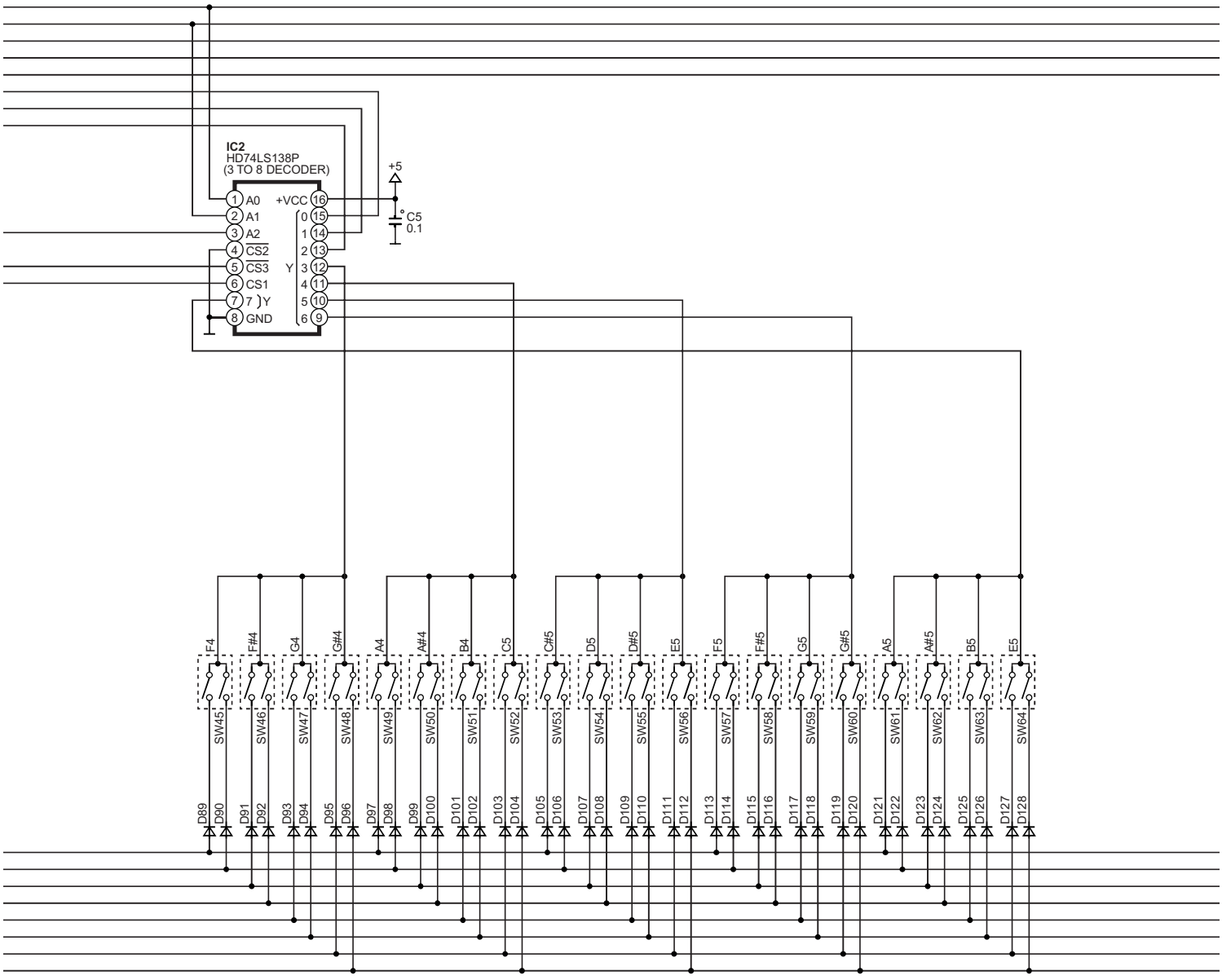


SCHEMATIC DIAGRAM-15

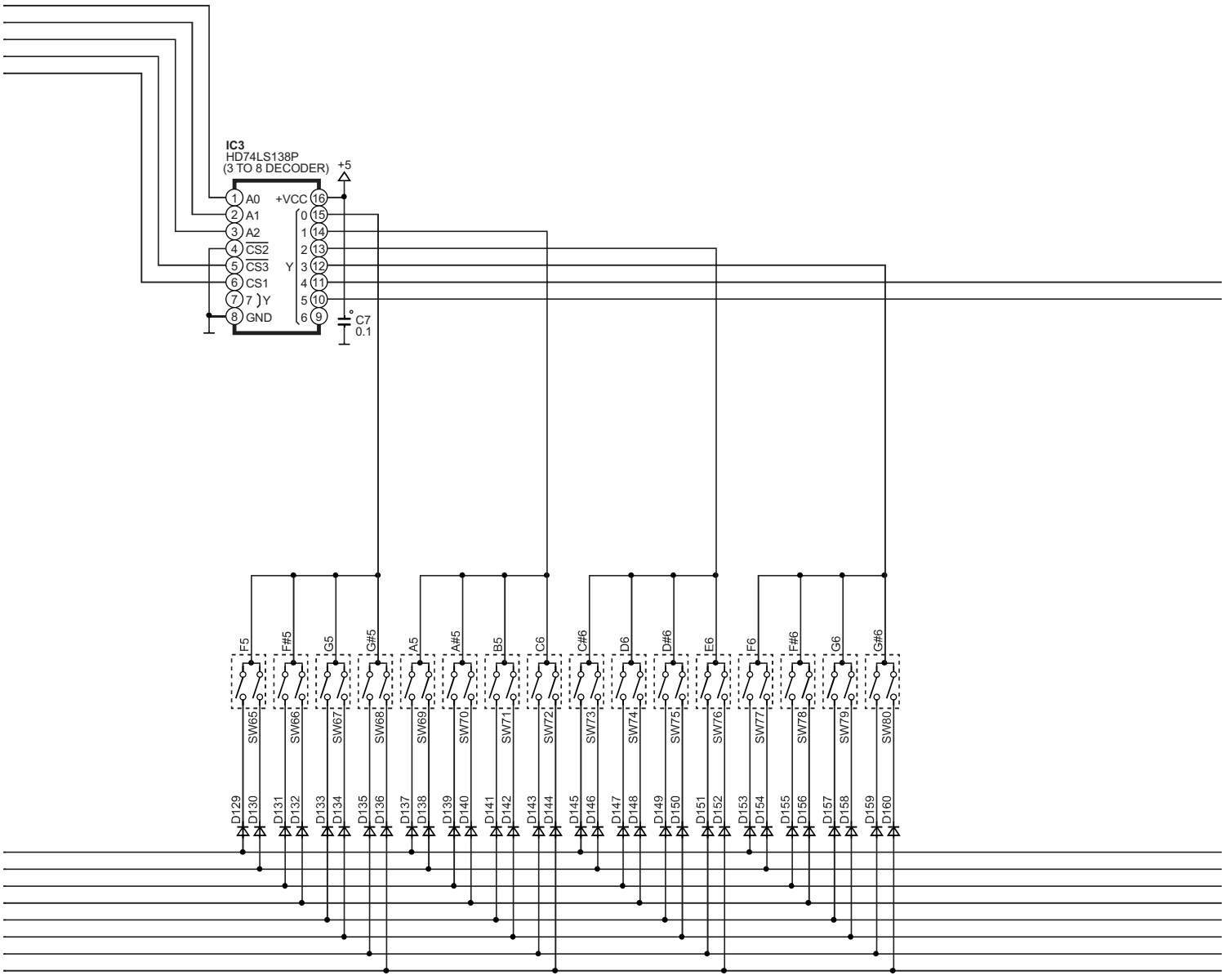


SX-NP10
MKB1, MKB2 SCHEMATIC DIAGRAM

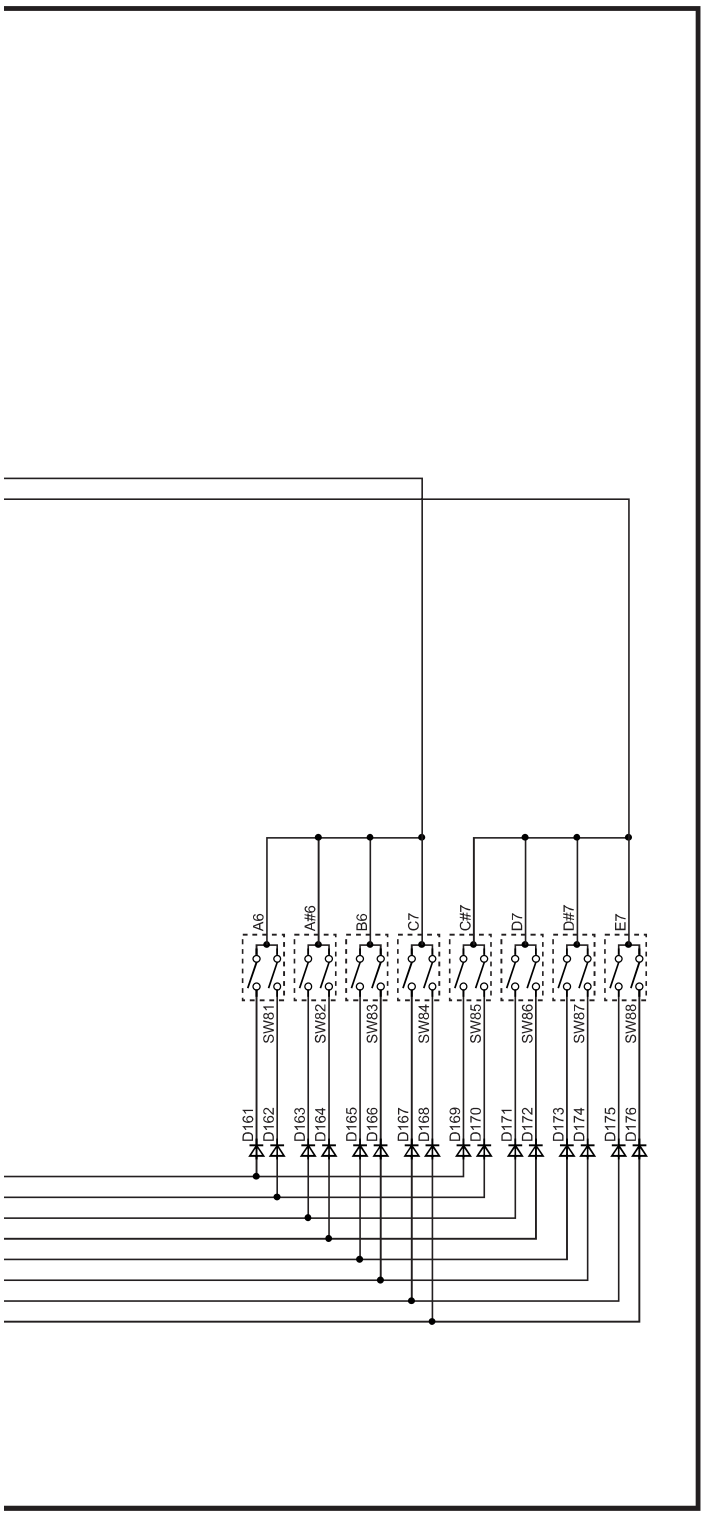
SCHEMATIC DIAGRAM-16



SCHEMATIC DIAGRAM-17

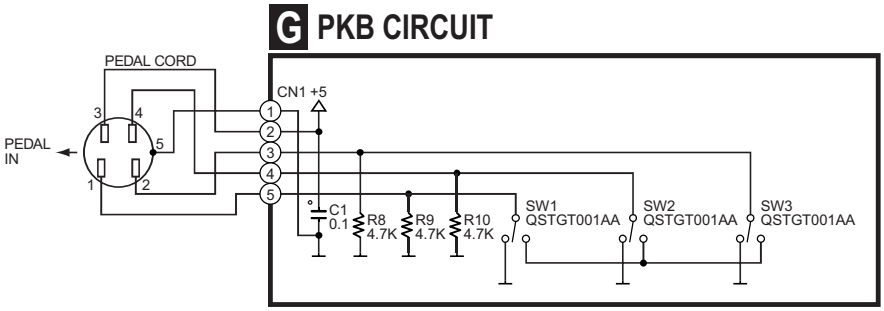


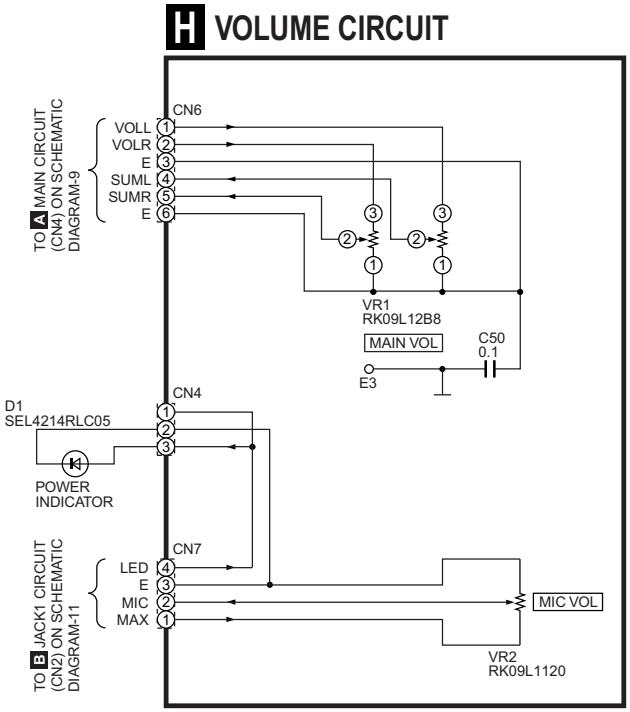
SCHEMATIC DIAGRAM-18



SX-NP10
MKB2 SCHEMATIC DIAGRAM

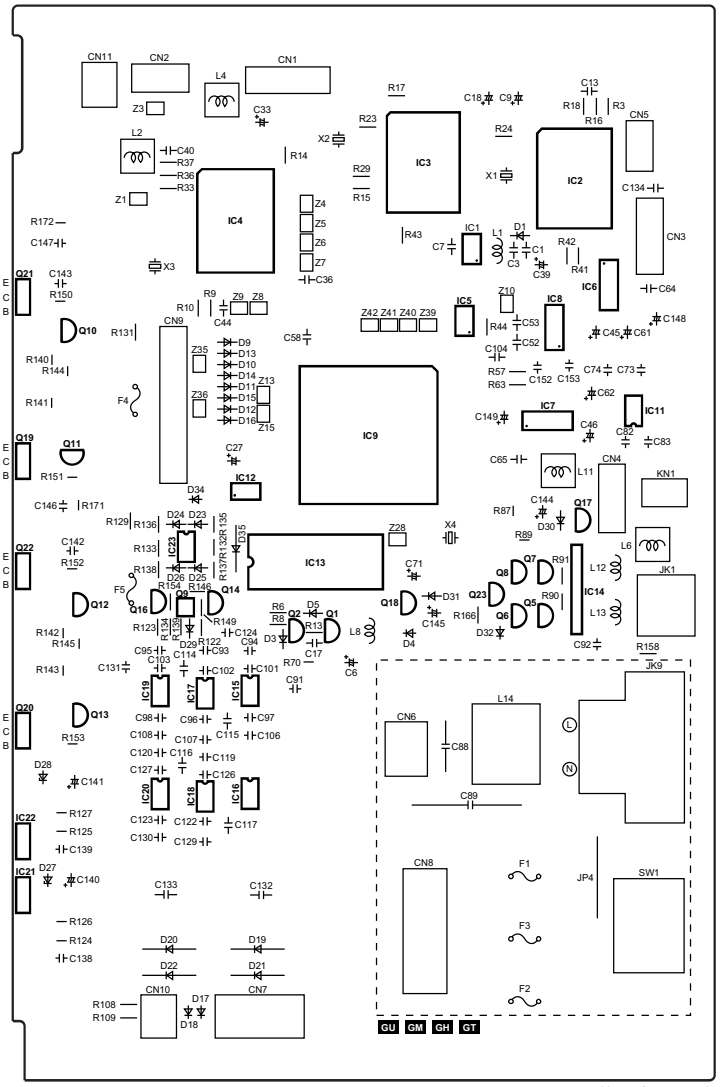
SCHEMATIC DIAGRAM-19





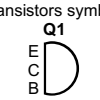
SX-NP10
PKB, VOLUME SCHEMATIC DIAGRAM

A MAIN P.C.B.(COMPONENT SIDE)

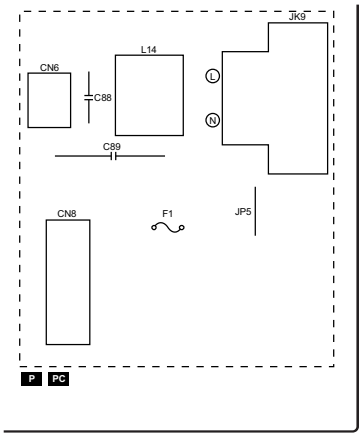


(SXPG236841)

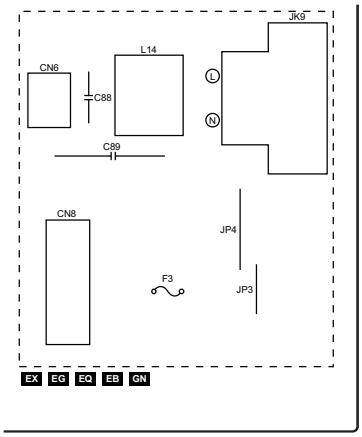
(Example)
Transistors symbolmark:



Applied for all transistors.



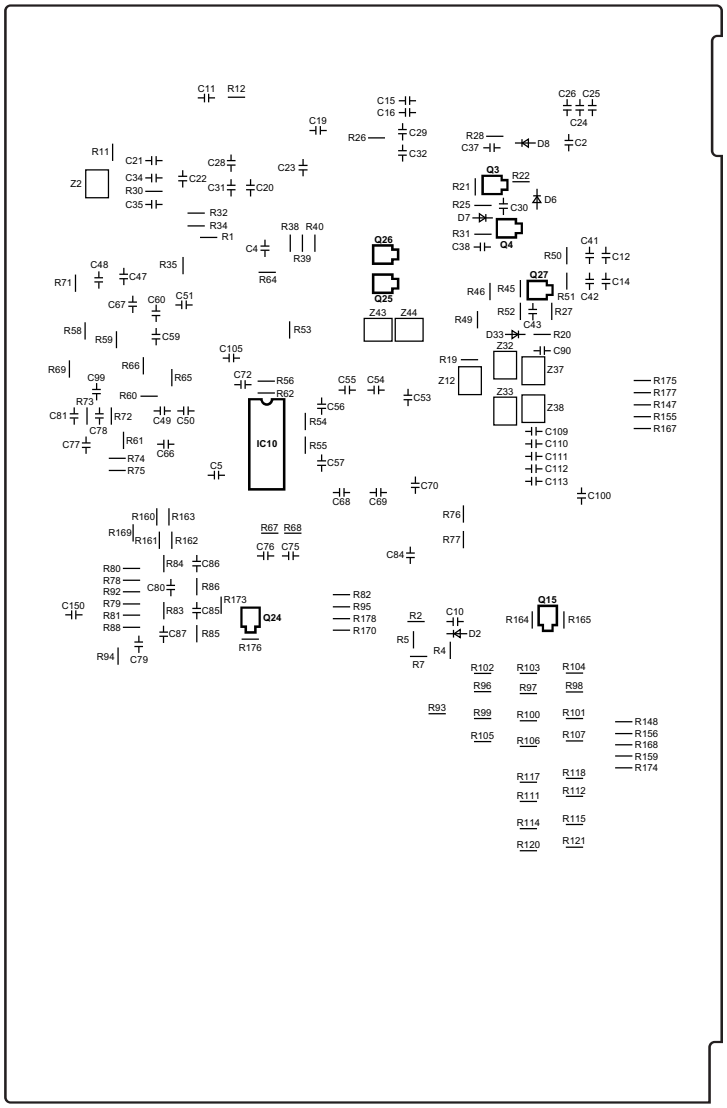
(SXPG236811)



(SXPG236831)

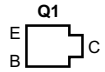
SX-NP10
MAIN P.C.B.
(COMPONENT SIDE)
SXPG236811 (P, PC) areas
SXPG236831
(EX, EG, EQ, EB, GN) areas
SXPG236841
(GU, GM, GH, GT) areas

A MAIN P.C.B.(FOIL SIDE)



(SXPG236841)

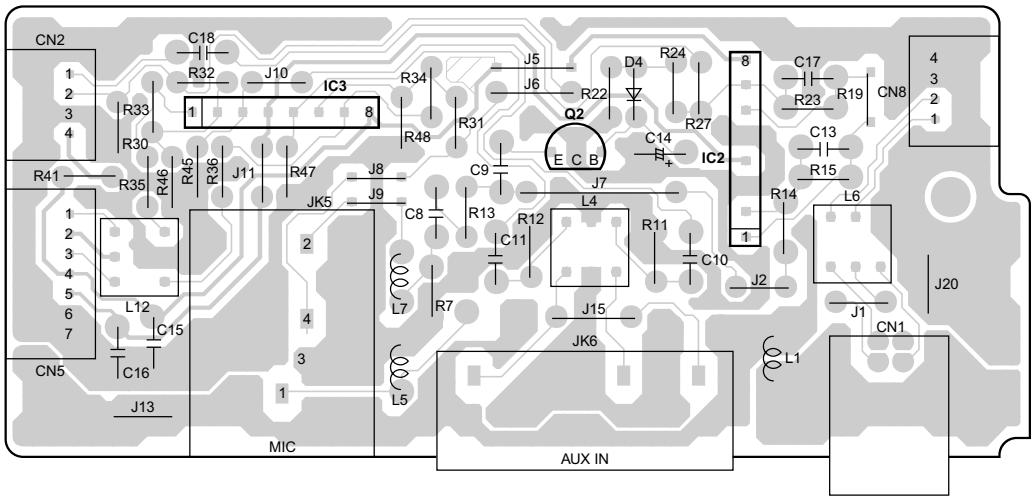
(Example)
Transistors symbolmark:



Applied for all transistors.

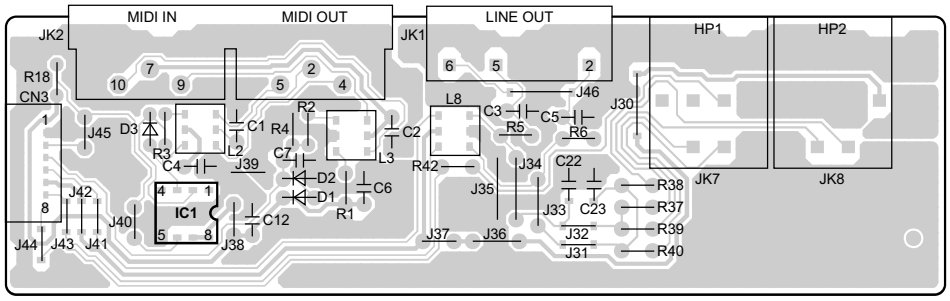
SX-NP10
MAIN P.C.B. (FOIL SIDE)
SXPG236811 (P, PC) areas
SXPG236831 (EX, EG, EQ, EB, GN) areas
SXPG236841 (GU, GM, GH, GT) areas

B JACK1 P.C.B.



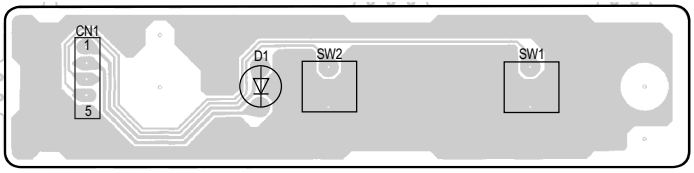
(SXPG236911A)

C JACK2 P.C.B.



(SXPG236911B)

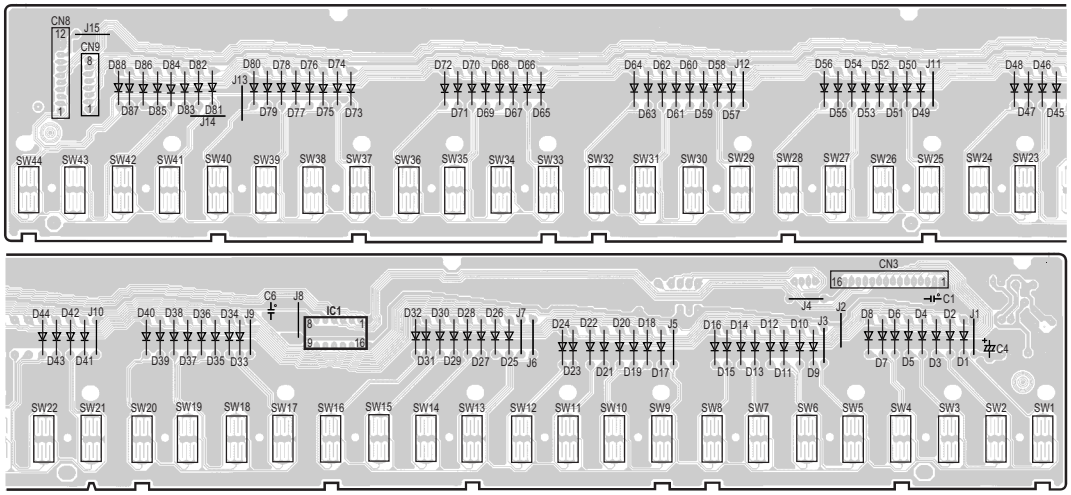
D SW P.C.B.



(SXPG235411)

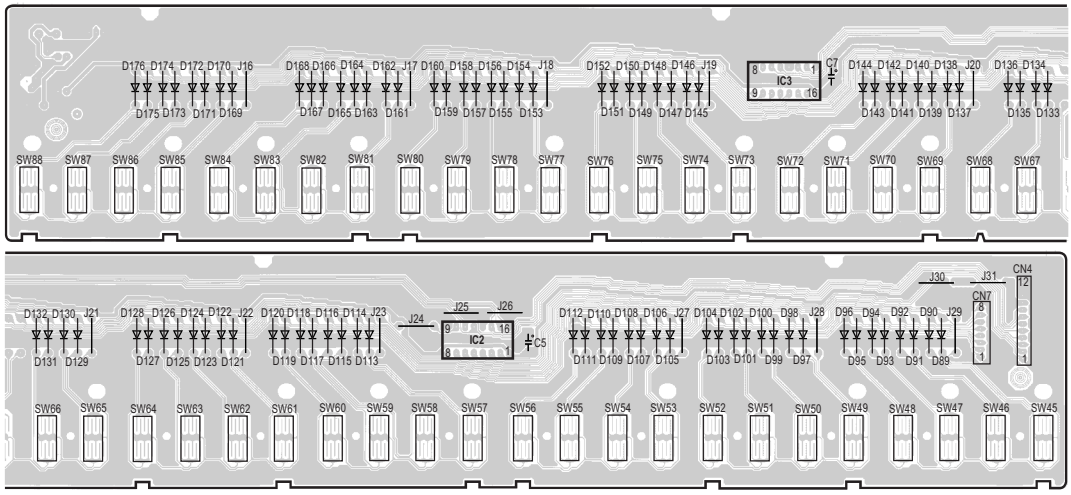
SX-NP10
JACK1, JACK2, SW P.C.B.
SXPG236911A: JACK1 P.C.B.
SXPG236911B: JACK2 P.C.B.
SXPG235411: SW P.C.B.

E MKB1 P.C.B.



(SXPG231111A)

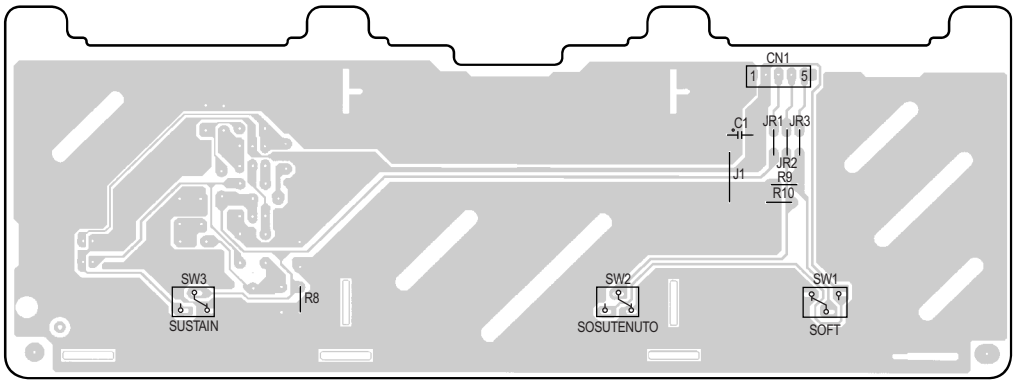
F MKB2 P.C.B.



(SXPG231111B)

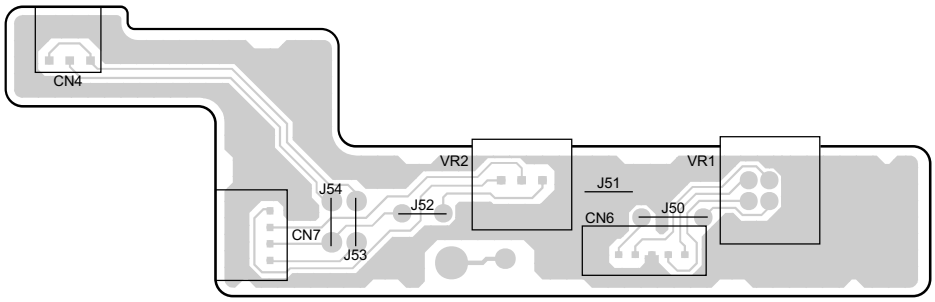
SX-NP10
MKB1, MKB2 P.C.B.
SXPG231111A: MKB1 P.C.B.
SXPG231111B: MKB2 P.C.B.

G PKB P.C.B.



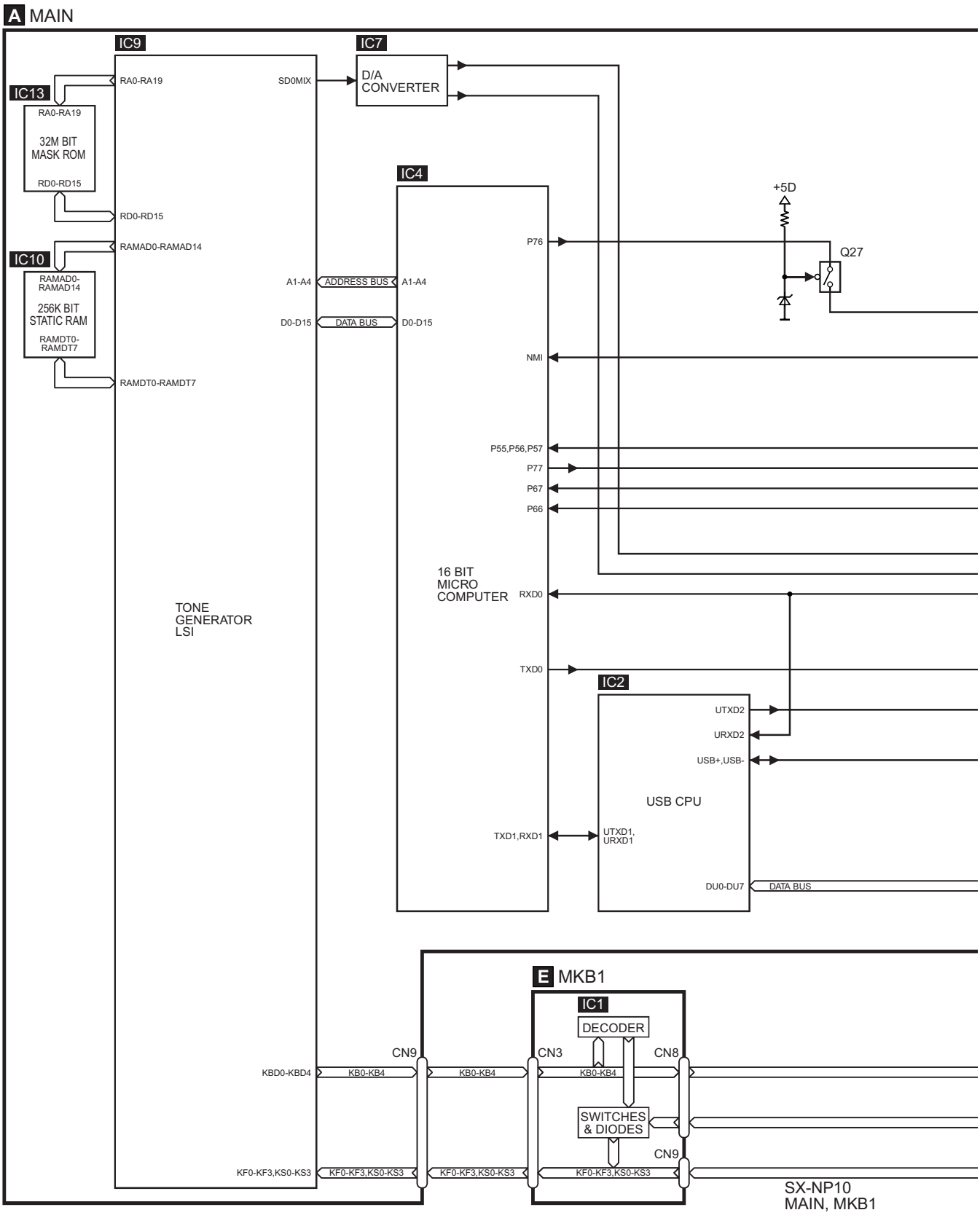
(SXPG218221)

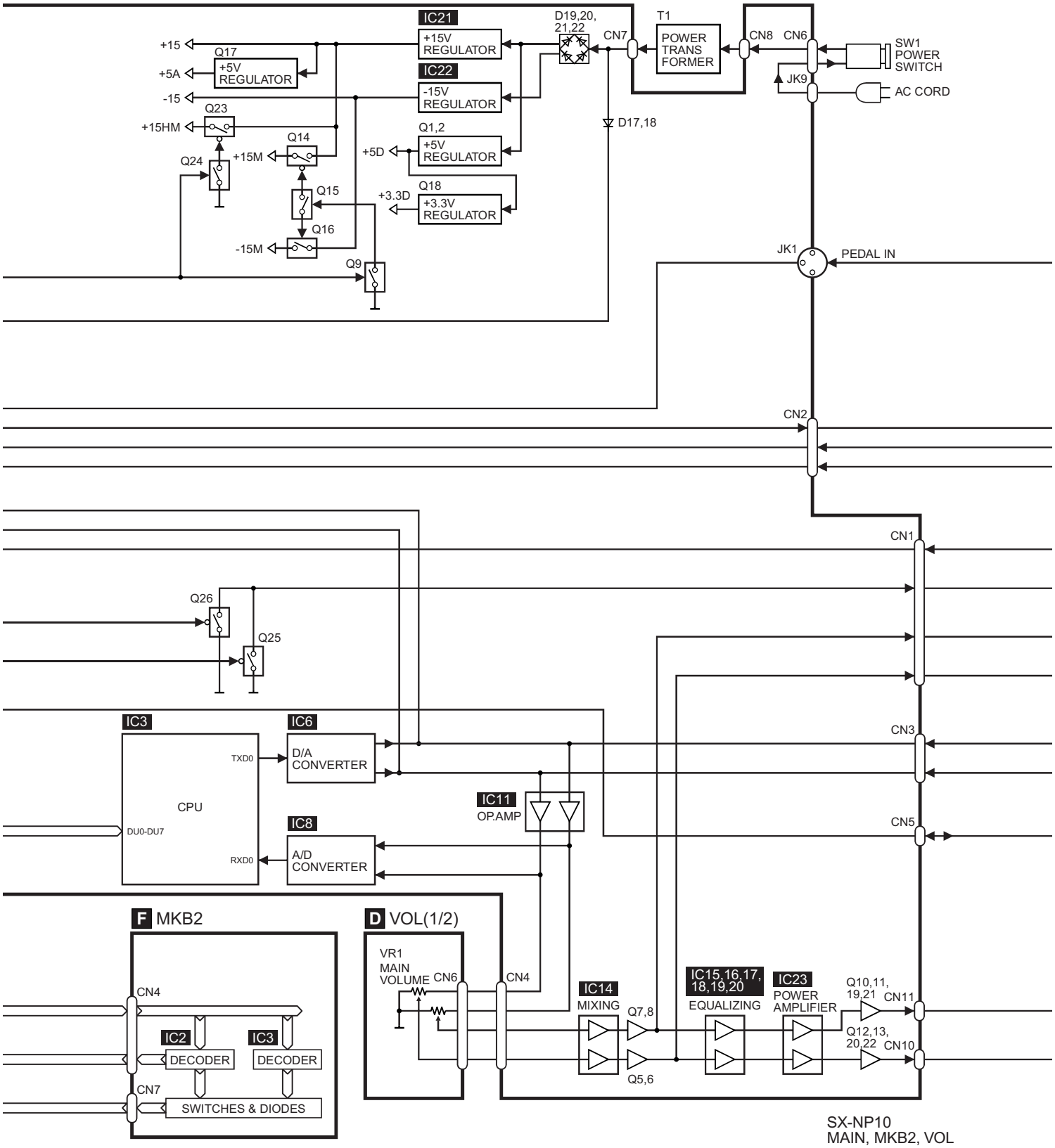
H VOLUME P.C.B.



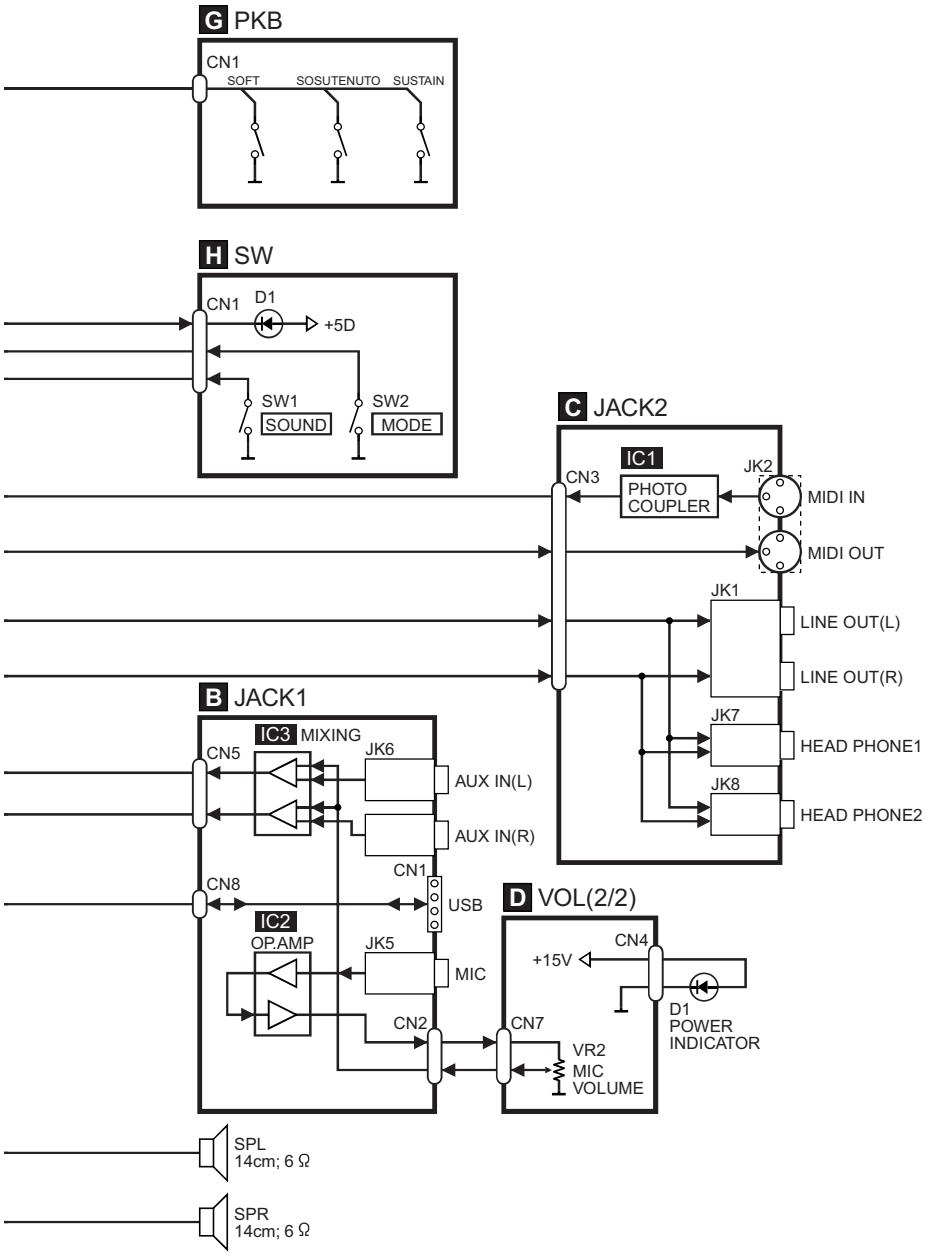
(SXPG236911C)

SX-NP10
PKB, VOLUME P.C.B.
SXPG218221: PKB P.C.B.
SXPG236911C: VOLUME P.C.B.

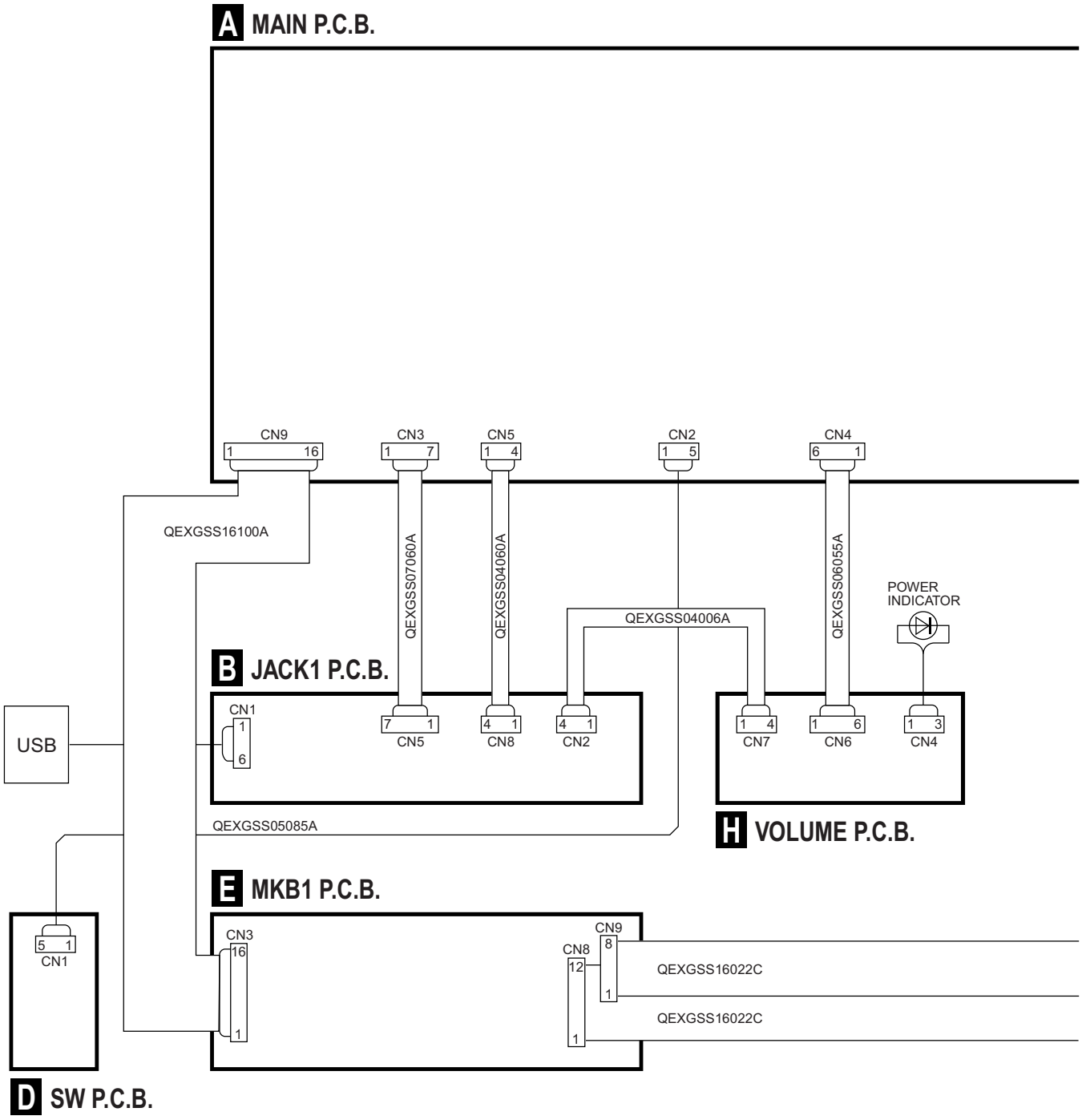

A MAIN
IC9
IC7
D/A CONVERTER
SD0MIX
RA0-RA19
IC13
RA0-RA19
32M BIT MASK ROM
RD0-RD15
RD0-RD15
RAMAD0-RAMAD14
IC10
RAMAD0-RAMAD14
256K BIT STATIC RAM
RAMDT0-RAMDT7
RAMDT0-RAMDT7
IC4
A1-A4
ADDRESS BUS
A1-A4
D0-D15
DATA BUS
D0-D15
+5D
P76
Q27
NMI
P55,P56,P57
P77
P67
P66
16 BIT MICRO COMPUTER
RXD0
TXD0
IC2
UTXD2
URXD2
USB+,USB-
USB CPU
TXD1,RXD1
UTXD1, URXD1
DU0-DU7
DATA BUS
TONE GENERATOR LSI
E MKB1
IC1
DECODER
CN9
CN3
CN8
KBD0-KBD4
KB0-KB4
KB0-KB4
KB0-KB4
SWITCHES & DIODES
CN9
KF0-KF3,KS0-KS3
KF0-KF3,KS0-KS3
KF0-KF3,KS0-KS3
KF0-KF3,KS0-KS3
SX-NP10
MAIN, MKB1

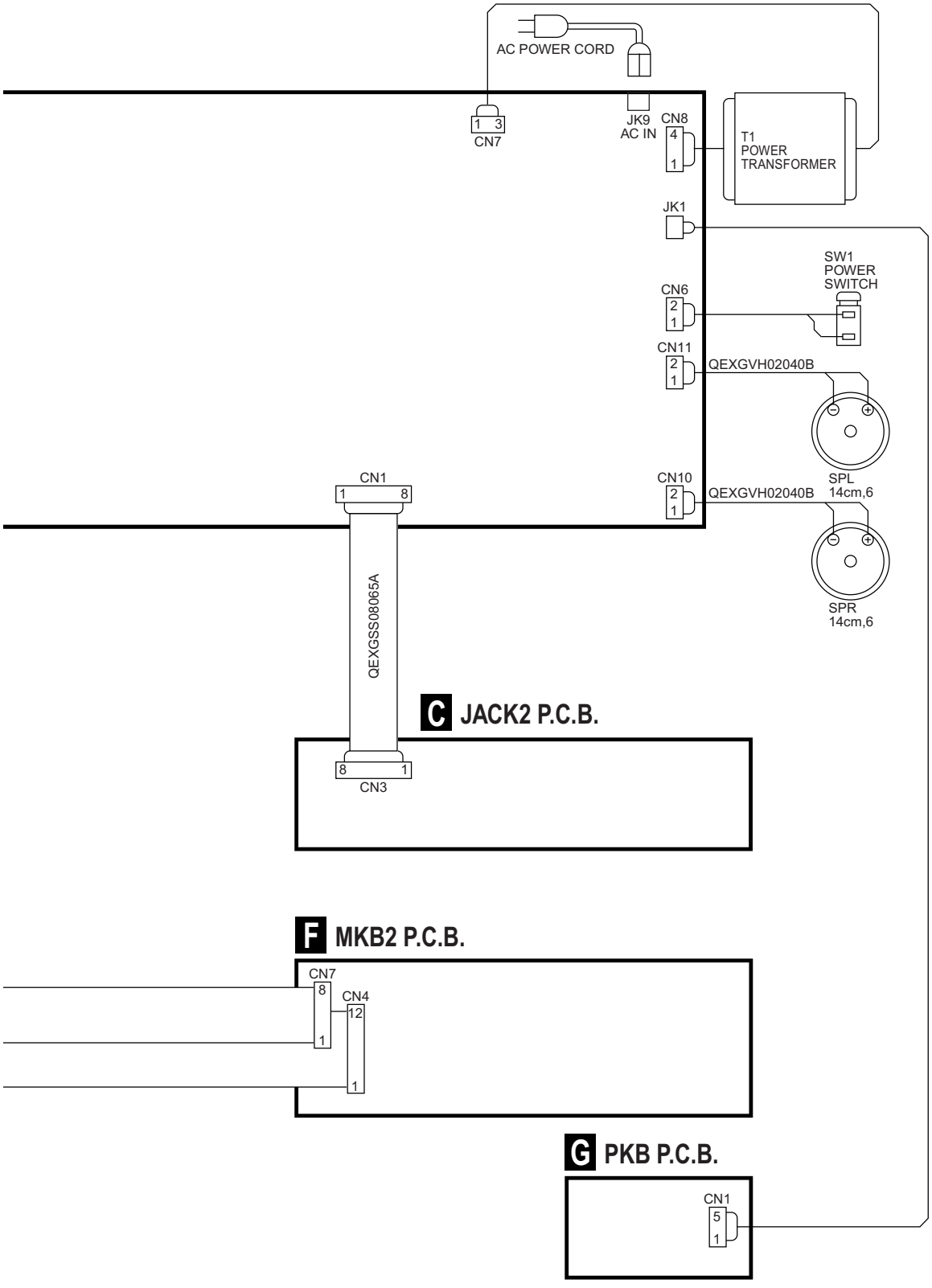


SX-NP10
MAIN, MKB2, VOL



SX-NP10
JACK1, JACK2, VOL, PKB, SW


A MAIN P.C.B.
CN9
1 16
CN3
1 7
CN5
1 4
CN2
1 5
CN4
6 1
QEXGSS16100A
QEXGSS07060A
QEXGSS04060A
QEXGSS04006A
QEXGSS06055A
POWER INDICATOR
B JACK1 P.C.B.
CN1
1
6
USB
7 1
CN5
4 1
CN8
4 1
CN2
1 4
CN7
1 6
CN6
1 3
CN4
QEXGSS05085A
H VOLUME P.C.B.
E MKB1 P.C.B.
5 1
CN1
CN3
16
1
CN9
8
1
CN8
12
1
QEXGSS16022C
QEXGSS16022C
D SW P.C.B.


AC POWER CORD
1 3
CN7
JK9
AC IN
CN8
4
1
T1
POWER
TRANSFORMER
JK1
SW1
POWER
SWITCH
CN6
2
1
CN11
2
1
QEXGVH02040B
SPL
14cm,6
CN10
2
1
QEXGVH02040B
SPR
14cm,6
CN1
1 8
QEXGSS08065A
8 1
CN3
C JACK2 P.C.B.
F MKB2 P.C.B.
CN7
8
1
CN4
12
1
G PKB P.C.B.
CN1
5
1

Funrthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
***Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F= Farads (F)**
***Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000K (OHM)**
***The marking <RTL> indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retentionperiod of availability is dependant on the type of assembly , and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.**
***Since SW consists of buttons and P.C.B.s, we do not supply it as an individual part (refer to "16. Manual Keyboard Parts Location".).**
***"<IA>-<IE>" marks in Remarks indicate languages of instruction manuals. [<IA> : American English, <IB> : English, <IC> : Spanish/ Danish/ Italian, <ID> :German/ French/ Netherlands, <IE>: Chinese]**
****1-*3 marks in Remarks indicates areas. [*1: (EX, EG, EQ, GU, GM, GT) areas, *2: Except (P, PC) areas, *3: (GU, GM GH, GT) areas.]**

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	XTV3+10C	SCREW	15	
2	GTT4+25AFZ	SCREW	5	
3	SBNG4010A	VOLUME KNOB	2	
4	SNEG770A	WASHER	1	
5	XNS12	NUT	2	
6	XTV3+10JFZ	SCREW	4	
7	XNS12FZ	NUT	1	
8	XNS9	NUT	2	
9	XTV3+12G	SCREW	4	
10	QGKG0159AB	KEYBOARD ORNAMENT	1	
11	XTB35+20A	SCREW	5	
12	QGKG0181AA	JACK PANEL ASS'Y	1	
13	QHDG021AA	SCREW	10	
14	QHDG055AA	SCREW	16	
15	QKQGA150AAZ	TOP PANEL ASS'Y	1	
15-1	QMFG1275AA	FELT	1	
15-2	QMFG1279AA	FELT	2	
15-3	XTB35+30A	SCREW	2	
15-4	XTS35+20A	SCREW	4	
15-5	XTT4+20A	SCREW	8	
16	QMQG0040AB	SLIDE RALE	2	
17	XTT4+20AFZ	SCREW	8	
18	QHDG068AA	SCREW	2	
19	QMFG1219AA	FELT	2	
20	XTN4+50AFZ	SCREW	2	
21	QLZG021A	CORE	3	
22	QMFG1093AA	FELT	2	
23	QMFG1276AA	FELT	1	
24	QMRG5256AA	CUSHION	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
25	QMRG5257AA	CUSHION	2	
26	QHDG068AA	SCREW	2	
27	QYAG2013AA	MUSIC STAND ASS'Y	1	
28	QMFG1219AA	FELT	1	
29	XTB35+25AFZ	SCREW	2	
30	XYN3+F16	SCREW	2	
31	XYN3+F25FZ	SCREW	2	
32	XTB3+20A	SCREW	4	
33	QYKG297AAZ	CABINET	1	
34	XTB35+25A	SCREW	12	
35	QYKG298AAZ	KEYBOARD ASS'Y	1	
40	XTB35+14A	SCREW	1	
41	XTT4+16A	SCREW	6	
42	XTT4+20AFZ	SCREW	8	
43	XYN4+F14	SCREW	5	
44	QMRG5211AA	CUSHION	2	
45	QMRG5228AA	CUSHION	2	
46	QMRG7098AA	HOLDER	2	
47	QWBG002AA	CLAMPER	1	
48	QXQG007AA	AXLETREE	1	
49	XTB4+10JFZ	SCREW	2	
50	XYN3+F12	SCREW	1	
51	XTT4+20A	SCREW	8	
52	XTB35+30A	SCREW	2	
53	XTV3+10JFZ	SCREW	5	
54	XTW3+14TFZ	SCREW	2	
55	XYA35+JA12	SCREW	8	
56	QKGG007AA	MAGNET	2	
57	QKQGB571AAZ	STAND SIDE PANEL (L)	1	
57-1	SHRG2130B-K	LEG	2	
57-2	SKLG251A	LEG (L)	1	
57-3	XTW3+16J	SCREW	4	
57-4	GTT4+35AFZ	SCREW	2	
58	QKQGB572AAZ	STAND SIDE PANEL (R)	1	
58-1	SHRG2130B-K	LEG	2	
58-2	SKLG261A	LEG (R)	1	
58-3	XTW3+16J	SCREW	4	
58-4	GTT4+35AFZ	SCREW	2	
59	QKQGD150AAZ	UNDER COVER	1	
60	QANG03007AAA	3PEDAL UNIT	1	
61	QJLG013AA	PEDAL CORD	1	K1EA04DD0001
62	QYKG295AAZ	PEDAL BOX ASS'Y	1	
63	XTB35+14A	SCREW	1	
64	XTT4+14A	SCREW	2	
65	QMBG009AA	SPRING	3	
65	XYN4+F16FZ	SCREW	2	
66	QMFG1133AA	FELT	3	
66	SBCG1660B	POWER SW BUTTON	1	
67	XTB4+12A	SCREW	5	
68	QKAG0011AA	FOOT	1	
69	XTN4+16F	SCREW	1	
70	QMFG1134AA	CUSHION	3	
71	QMFG1135AA	CUSHION	3	
72	QMWG4001AA	PEDAL ARM	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
73	QMRG5254AA	CUSHION	2	
74	QMRG5260AA	CUSHION	1	
101	QGPG0139BB	END COVER PANEL,LEFT	1	
102	QMFG1104AA	FELT	2	
103	QGPG0140BD	END COVER PANEL,RIGHT	1	
104	QGUG1458AAK	BUTTON	2	
105	QMCG011CA	SPRING	88	
106	QMFG1265AA	FELT	2	
107	QMFG1266BA	FELT	4	
108	QMFG1267BA	FELT	2	
109	QMFG1268BA	FELT	2	
110	QMGG060BA	RUBBER CAP(HAMMER)	88	
111	QMWG1041AA	WHITE KEY(FIRST OCT A)	1	
112	QMWG1042AA	WHITE KEY(B KEY)	8	
113	QMWG1043AA	WHITE KEY(C KEY)	7	
114	QMWG1044AA	WHITE KEY(D KEY)	7	
115	QMWG1045AA	WHITE KEY(E KEY)	7	
116	QMWG1046AA	WHITE KEY(F KEY)	7	
117	QMWG1047AA	WHITE KEY(G KEY)	7	
118	QMWG1048AA	WHITE KEY(A KEY)	7	
119	QMWG1049AA	WHITE KEY(TOP OCTAVE C)	1	
120	QMWG2006AA	BLACK KEY	36	
121	QMWG6020AA	RUBBER SWITCH	7	
122	QMWG6021AA	RUBBER SWITCH	1	
123	QMWG8040AA	FUL CU RUM(12 PCS,ON ONE)	8	
124	QMWG8045AA	KEY GUIDE	88	
125	QMWG8038AA	HAMMER SUPPORT(WHITE KEY)	52	
126	QMWG9025AA	HAMMER(WHITE KEY)	12	
127	QMWG9025AB	HAMMER(WHITE KEY)	19	
128	QMWG9025AC	HAMMER(WHITE KEY)	11	
129	QMWG9025AD	HAMMER(WHITE KEY)	10	
130	QMWG8039BA	HAMMER SUPPORT(BLACK KEY)	36	
131	QMWG9027AA	HAMMER(BLACK KEY)	8	
132	QMWG9027AB	HAMMER(BLACK KEY)	14	
133	QMWG9027AC	HAMMER(BLACK KEY)	7	
134	QMWG9027AD	HAMMER(BLACK KEY)	7	
135	QMWG8041AA	FULCURUM(4PCS,ON ONE)	1	
136	XTV3+12G	SCREW	4	
137	XTW3+10T	SCREW	14	
138	XTV3+20JFZ	SCREW	2	
A1	K2DA42E00001	ATTACHMENT PLUG	1	(GU,GT)
A2	QFVG2038A	CD-ROM	1	
A3	RJA0035-1X	AC CORD	1	(GN) ⚠
A3	RJA0065-A	AC CORD	1	K2CB2CB00006 (P,PC) ⚠
A3	SJAG65	AC CORD	1	K2CR2ED00001 *1 ⚠
A3	VJA0733	AC CORD	1	K2CT3DA00001 (EB,GH) ⚠
A4	QQFGNP10AA	FANBAG ASS'Y	1	(P)<IA>
A4	QQFGNP10CA	FANBAG ASS'Y	1	(EX,GU)<IB><IC>
A4	QQFGNP10DA	FANBAG ASS'Y	1	(PC)<IB><ID>
A4	QQFGNP10EA	FANBAG ASS'Y	1	(EB,GN,GM)<IB>
A4	QQFGNP10FA	FANBAG ASS'Y	1	(EG)<IC><ID>
A4	QQFGNP10GA	FANBAG ASS'Y	1	(GH,GT)<IB><IE>

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
A4	QQFGNP10HA	FANBAG ASS'Y	1	(EQ)<ID>
C1	ECRR1H104ZF	50V 0.1U	1	MKB1
C1	ECJ1VG1H330J	50V 33U	1	MAIN
C1	ECRF1H104ZF	50V 0.1U	1	PKB
C1	ECRR1H104ZF	50V 0.1P	1	JACK2
C2	ECRR1H104ZF	50V 0.1P	1	JACK2
C2	ECUV1H471JG	50V 470P	1	MAIN
C3	ECJ1VG1H100D	50V 10U	1	MAIN
C3	ECQG1H222KZ	50V 2200P	1	F0A1H222A026 JACK2
C3	ECRR1H104ZF	50V 0.1P	2	MKB2
C4	ECEA0JKA470E	6.3V 47U	1	MKB1
C4	ECRR1H104ZF	50V 0.1P	1	JACK2
C4	ECUV1H104ZFX	50V 0.1U	1	MAIN
C5	ECQG1H222KZ	50V 2200P	1	F0A1H222A026 JACK2
C5	ECRR1H104ZF1	50V 0.1U	1	F1E1H1040023 MKB2
C5	ECUV1H104ZFX	50V 0.1U	1	MAIN
C6	ECA1VM470	35V 47U	1	MAIN
C6	ECRR1H104ZF	50V 0.1P	1	JACK2
C6	ECRR1H104ZF1	50V 0.1U	1	F1E1H1040023 MKB1
C7	ECCR1H221J5	50V 220P	1	JACK2
C7	ECJ1VG1H330J	50V 33U	1	MAIN
C7	ECRR1H104ZF1	50V 0.1U	1	F1E1H1040023 MKB2
C8,C9	ECEA1HKN010	50V 1U	2	JACK1
C9	ECEA1HKS2R2	50V 2.2U	1	MAIN
C10	ECEA1HKN010	50V 1U	1	JACK1
C10	ECUV1H104ZFX	50V 0.1U	1	MAIN
C11	ECEA1HKN010	50V 1U	1	JACK1
C11	ECUV1H104ZFX	50V 0.1U	1	MAIN
C12	ECRR1H104ZF	50V 0.1P	1	JACK2
C12	ECUV1H471JG	50V 470P	1	MAIN
C13	ECCR1H470J5	50V 47P	1	JACK1
C13	ECUV1H101JG	50V 10U	1	ECJ2VG1H101J MAIN
C14	ECEA0JKA470	6.3V 47U	1	JACK1
C14	ECUV1H471JG	50V 470P	1	MAIN
C15,16	ECRR1H104ZF1	50V 0.1U	2	F1E1H1040023 JACK1
C15,16	ECUV1H101JG	50V 100P	2	ECJ2VG1H101J MAIN
C17	ECCR1H470J5	50V 47P	1	JACK1
C17	ECUV1H101JV	50V 100P	1	MAIN
C18	ECEA1CKA100	16V 10U	1	MAIN
C18	ECEA1HKN010	50V 1U	1	JACK1
C19-21	ECUV1H104ZFX	50V 0.1U	3	MAIN
C22	ECQB1H473JF3	50V 0.047U	1	JACK2
C22	ECUV1H104ZFX	50V 0.1U	1	MAIN
C23	ECQB1H473JF3	50V 0.047U	1	JACK2
C23,24	ECRR1H104ZF1	50V 0.1U	2	F1E1H1040023 MAIN
C25,26	ECUV1H104ZFX	50V 0.1U	2	MAIN
C27	ECA0JM102	6.3V 1000U	1	MAIN
C28	ECUV1H030CCN	50V 3P	1	MAIN
C29	ECJ1VG1H030C	50V 3P	1	MAIN
C30	ECUV1H104ZFX	50V 0.1U	1	MAIN
C31	ECUV1H030CCN	50V 3P	1	MAIN
C32	ECJ1VG1H030C	50V 3P	1	MAIN
C33	ECEA1CKA100	16V 10U	1	MAIN

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C34	ECJ1VG1H681J	50V 680U	1	MAIN
C35-37	ECUV1H104ZFX	50V 0.1U	3	MAIN
C38	ECUV1H102JX	50V 0.001U	1	MAIN
C39	ECEA1CKA100	16V 10U	1	MAIN
C40	ECUV1H104ZFX	50V 0.1U	1	MAIN
C41,42	ECJ1VG1H030C	50V 3U	2	MAIN
C43	ECUV1H101JG	50V 100P	1	ECJ2VG1H101J MAIN
C44	ECUV1H104ZFX	50V 0.1U	1	MAIN
C45,46	ECEA1CKA100	16V 10U	2	MAIN
C47-51	ECUV1H104ZFX	50V 0.1U	5	MAIN
C52,53	ECUV1H471JV	50V 470P	2	ECJ1VG1H471J MAIN
C54-60	ECUV1H104ZFX	50V 0.1P	7	MAIN
C61	ECEA1CKA100	16V 10U	1	MAIN
C62	ECEA0JKA101	6.3V 100U	1	MAIN
C63-70	ECUV1H104ZFX	50V 0.1P	8	MAIN
C71	ECA0JM221B	6.3V 220U	1	MAIN
C72	ECUV1H104ZFX	50V 0.1P	1	MAIN
C73,74	ECEA1CKN100B	50V 10U	2	MAIN
C75,76	ECUV1H030CCN	50V 3P	2	MAIN
C77	ECUV1H104ZFX	50V 0.1U	1	MAIN
C78	ECJ1VG1H221J	50V 220P	1	MAIN
C79,80	ECUV1H104ZFX	50V 0.1U	2	MAIN
C81	ECUV1H221JG	50V 220P	1	MAIN
C82,83	ECEA1CKN100B	50V 10U	2	MAIN
C84	ECUV1H104ZFX	50V 0.1P	1	MAIN
C85,86	ECJ1VG1H100D	50V 10P	2	MAIN
C87	ECUV1H104ZFX	50V 0.1U	1	MAIN
C88	ECKCVA1472MF	500V 4700P	1	F1B2H4720008 MAIN
C89	ECQU2A104MN	250V 0.1U	1	MAIN
C90	ECUV1H104ZFX	50V 0.1P	1	MAIN
C91,92	ECQB1H103JZ	50V 0.01U	2	MAIN
C93	ECEA1HKN010	50V 1U	1	MAIN
C94	ECQG1H682KZT	50V 0.0068U	1	F0A1H682A025 MAIN
C95	ECQV1H683JM	50V 0.068U	1	MAIN
C96	ECEA1HKN010	50V 1U	1	MAIN
C97	ECQG1H682KZT	50V 0.0068U	1	F0A1H682A025 MAIN
C98	ECQV1H683JM	50V 0.068U	1	MAIN
C99,100	ECUV1H104ZFX	50V 0.1U	2	MAIN
C101	ECQG1H102KZ	50V 0.001U	1	F0A1H102A026 MAIN
C102	ECQB1H104JF3	50V 0.1P	1	MAIN
C103	ECQG1H102KZ	50V 0.001U	1	F0A1H102A026 MAIN
C104,05	ECUV1H104ZFX	50V 0.1U	2	MAIN
C106	ECQG1H102KZ	50V 0.001U	1	F0A1H102A026 MAIN
C107	ECQB1H104JF3	50V 0.1P	1	MAIN
C108	ECQG1H102KZ	50V 0.001U	1	F0A1H102A026 MAIN
C109-13	ECUV1H101JG	50V 100P	5	ECJ2VG1H101J MAIN
C114-17	ECUV1H104ZFX	50V 0.1U	4	MAIN
C119	ECQB1H104JF	50V 0.1P	1	MAIN
C120	ECQG1H683KZ	50V 0.068U	1	F0A1H683A026 MAIN
C122	ECQB1H104JF	50V 0.1P	1	MAIN
C123	ECQG1H683KZ	50V 0.068U	1	F0A1H683A026 MAIN
C124	ECQV1H154JM	50V 0.15U	1	MAIN
C126	ECQG1H153KZ	50V 0.015U	1	F0A1H153A026 MAIN
C127	ECQG1H472KZ	50V 0.0047U	1	F0A1H472A026 MAIN

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C129	ECQG1H153KZ	50V 0.015U	1	F0A1H153A026 MAIN
C130	ECQG1H472KZ	50V 0.0047U	1	F0A1H472A026 MAIN
C131	ECQV1H154JM	50V 0.15U	1	MAIN
C132,33	ECA1VM472	35V 4700U	2	MAIN
C134	ECUV1H104ZFX	50V 0.1U	1	MAIN
C138,39	ECUV1H104ZFX	50V 0.1P	2	MAIN
C140,41	ECEA1CKA100	16V 10U	2	MAIN
C138	ECUV1H104ZFX	50V 0.1U	1	MAIN
C142,43	ECQB1H223JF	50V 0.022U	2	MAIN
C144,45	ECEA1CKA100	16V 10U	2	MAIN
C146,47	ECQV1H104JM	50V 0.1U	2	MAIN
C148,49	ECEA1CKA100	16V 10U	2	MAIN
C150,51	ECUV1H104ZFX	50V 0.1U	2	MAIN
C152,53	ECEA1HKN010	50V 1U	2	MAIN
CN1	QJSG022AA	CONNECTOR(6P)	1	K1FB104B0023 JACK1
CN1	SJPG1JS050A	CONNECTOR(5P)	1	SW
CN1	SJPG1JS080A	CONNECTOR(8P)	1	MAIN
CN2	SJPG1JS050A	CONNECTOR(5P)	1	MAIN
CN2	SJPG2JS040A	CONNECTOR(4P)	1	JACK1
CN3	SJPG1JS070A	CONNECTOR(7P)	1	MAIN
CN3	SJPG2JS080A	CONNECTOR(8P)	1	JACK2
CN4	QJUG00703AA	CONNECTOR(3P)	1	VOL
CN4	SJPG1JS060A	CONNECTOR(6P)	1	MAIN
CN5	SJPG1JS040A	CONNECTOR(4P)	1	MAIN
CN5	SJPG2JS070A	CONNECTOR(7P)	1	JACK1
CN6	SJPG1JS060A	CONNECTOR(6P)	1	VOL
CN6	SJPG7JS020A	CONNECTOR(2P)	1	MAIN
CN7	SJPG2JS040A	CONNECTOR(4P)	1	VOL
CN7	SJPG7JS030A	CONNECTOR(3P)	1	MAIN
CN8	QJUG00212AA	CONNECTOR(12P)	1	MKB1
CN8	SJPG2JS040A	CONNECTOR(4P)	1	JACK1
CN8	SJPG7JS040A	CONNECTOR(4P)	1	MAIN
CN9	QJUG01408AA	CONNECTOR(8P)	1	MKB1
CN9	SJPG1JS160A	CONNECTOR(16P)	1	MAIN
CN10,11	SJPG1290A	CONNECTOR(2P)	2	MAIN
D1	LN282RPXVTX3	LED	1	LNJ282RKRX02 SW
D1	MA165TA5	DIODE	1	MA2C16500E JACK2
D1-88	MA165TA5	DIODE	88	MA2C16500E MKB1
D1	MA304	DIODE	1	MA2Z304 MAIN
D1	SEL4214RLC05	LED	1	VOL
D2	MA165TA5	DIODE	1	MA2C16500E JACK2
D2	MAZ80470HL	DIODE	1	MAIN
D3	MA111TX	DIODE	1	MA2J11100L MAIN
D3	MA165TA5	DIODE	1	MA2C16500E JACK2
D4	EK04W	DIODE	1	B0JAME000042 MAIN
D4	MA165TA5	DIODE	1	MA2C16500E JACK1
D5	MA110TX	DIODE	1	MA2Z11000L MAIN
D6	MA8030L	DIODE	1	MAZ80300LL MAIN
D7-16	MA111TX	DIODE	10	MA2J11100L MAIN
D17,18	ERA1502V5	DIODE	2	B0EAKM000061 MAIN
D19-22	B0EAMM000030	DIODE	4	MAIN
D23-26	MA111-TX	DIODE	4	MA2J11100L MAIN

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D27,28	MA4180TA	DIODE	2	MAZ418000F MAIN
D29	MA111-TX	DIODE	1	MA2J11100L MAIN
D30	MA8056	DIODE	1	MAZ8056 MAIN
D31	MA8039H	DIODE	1	MAZ80390H MAIN
D32	EK04W	DIODE	1	B0JAME000042 MAIN
D33	MA8030L	DIODE	1	MAIN
D34	EK04W	DIODE	1	B0JAME000042 MAIN
D35	MA2062LF	DIODE	1	MAZ2062000LF MAIN
D89-176	MA165TA5	DIODE	88	MA2C16500E MKB2
F1	XBA1C40NB100	FUSE,4A	1	MAIN(P,PC) ⚠
F1	XBA2C16TB0L	FUSE,T1.6AL	1	K5Y162B00002 MAIN*3 ⚠
F2	XBA2C10TB0	FUSE,T1AL	1	K5D102BL0005 MAIN*3 ⚠
F3	XBA2C10TB0	FUSE,T1AL	1	K5D102BL0005 MAIN*2 ⚠
F4,F5	XBA1C20NB100	FUSE,2A	2	MAIN(P,PC) ⚠
F4,5	XBA2C16TB0L	FUSE,2A	1	K5Y162B00002 MAIN*2 ⚠
IC1	HD74LS138P	IC	1	C0JACN000001 MKB1
IC1	QCPL-260P	IC	1	JACK2
IC1	T7WU04FTE12L	IC	1	C0JBAZ000527 MAIN
IC2,3	HD74LS138P	IC	2	C0JACN000001 MKB2
IC2	M37640M8129F	IC	1	C2BBGD000070 MAIN
IC2	M5218AL	IC	1	C0AABB000054 JACK1
IC3	M30622M4108F	IC	1	C2CBFF000002 MAIN
IC3	M5218AL	IC	1	C0AABB000054 JACK1
IC4	C2CBHF000198	IC	1	MAIN
IC5	TC7W00FTE12L	IC	1	C0JBAC000112 MAIN
IC6,7	PCM1734EB	IC	2	MAIN
IC8	PCM1800E-T1	IC	1	C0FBAJ000004 MAIN
IC9	D97315GD201	IC	1	C1ZBZ0001934 MAIN
IC10	M5256DFP10VL	IC	1	C3BBFC000237 MAIN
IC11	M5218AFPE3	IC	1	C0ABBB000163 MAIN
IC12	TC7W08FTE12L	IC	1	C0JBAA000103 MAIN
IC13	QSIGX3C32003	IC	1	MAIN
IC14	M5218AL	IC	1	C0AABB000054 MAIN
IC15-20	M5218AFPE3	IC	6	C0ABBB000163 MAIN
IC21	KIA7815PI	IC	1	C0CAALG00016 MAIN ⚠
IC22	KIA7915PI	IC	1	C0CABLG00006 MAIN ⚠
IC23	M5218AFPE3	IC	1	C0ABBB000163 MAIN
JK1	QJJG008AA	JACK,AUX IN R/L	1	K2HA206B0002 JACK2
JK1	QJSG007AA	JACK,PEDAL IN	1	MAIN
JK2	QJJG005AA	JACK,MIDI OUT/IN	1	JACK2
JK5	QJJG011AA	JACK,MIC	1	JACK1
JK6	QJJG008AA	JACK,AUX IN R/L	1	K2HA206B0002 JACK1
JK7,K8	SJJG100A	JACK,HEADPHONE 1/2	2	K2HB103J0056 JACK2
JK9	SJSD16	JACK,AC INLET	1	K2AB2K000002 MAIN ⚠
L1	QLQGT1B800MA	80UH	1	G0C800Z00001 MAIN
L2	QLQGT3T131LA	130MH×3	1	MAIN
L2	QLQGT3T131LA	130MH×3	1	JACK2

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L3	QLQGT3T131LA	130MH×3	1	MAIN
L3	QLQGT3T131LA	130MH×3	1	JACK2
L4	QLQGT3T131LA	130MH×3	1	MAIN
L4	QLQGT3T131LA	130MH×3	1	JACK1
L5	QLQGT1B101KA	100UH	1	G0C101K00030 JACK1
L6	QLQGT3T131LA	130MH×3	1	MAIN
L6	QLQGT3T131LA	130MH×3	1	JACK1
L7	QLQGT1B101KA	100UH	1	G0C101K00030 JACK1
L8	QLQGT1B101KA	100UH	1	G0C101K00030 MAIN
L8	QLQGT3T131LA	130MH×3	1	JACK2
L11	QLQGT3T131LA	130MH×3	1	MAIN
L12	QLQGT1B101KA	100UH	1	G0C101K00030 MAIN
L12	QLQGT3T131LA	130MH×3	1	JACK1
L13	QLQGT1B101KA	100UH	1	G0C101K00030 MAIN
L14	QLQGT2T100LA	10UH×2	1	MAIN ⚠
P1	QPGG0504AA	PACKING CASE	1	
PCB1	SXPG236811	MAIN P.C.B.	1	(P,PC)(RTL)
PCB1	SXPG236831	MAIN P.C.B.	1	(EX,EG,EQ,EB,GN)(RTL)
PCB1	SXPG236841	MAIN P.C.B.	1	(GU,GM,GH,GT)(RTL)
PCB2	SXPG236911B	JACK2 P.C.B.	1	(RTL)
PCB3	SXPG236911A	JACK1 P.C.B.	1	(RTL)
PCB4	SXPG236911C	VOLUME P.C.B.	1	(RTL)
PCB5	SXPG235411	SW P.C.B.	1	(RTL)
PCB6	SXPG231111A	MKB1 P.C.B.	1	(RTL)
PCB7	SXPG231111B	MKB2 P.C.B.	1	(RTL)
PCB8	SXPG218221	PKB P.C.B.	1	(RTL)
Q1	2SB621A-R	TRANSISTOR	1	2SB0621AH MAIN
Q2	2SC1815TPE2	TRANSISTOR	1	B1AACF000023 JACK1
Q2	B1AACF000068	TRANSISTOR	1	MAIN
Q3	2SB0709ARL	TRANSISTOR	1	MAIN
Q4	2SD0601AQL	TRANSISTOR	1	MAIN
Q5	B1AAKD000008	TRANSISTOR	1	MAIN
Q6	B1ACKD000002	TRANSISTOR	1	MAIN
Q7	B1AAKD000008	TRANSISTOR	1	MAIN
Q8	B1ACKD000002	TRANSISTOR	1	MAIN
Q9	2SD0601AQL	TRANSISTOR	1	MAIN
Q10	B1AACF000068	TRANSISTOR	1	MAIN
Q11	B1ACCF000041	TRANSISTOR	1	MAIN
Q12	B1AACF000068	TRANSISTOR	1	MAIN
Q13,14	B1ACCF000041	TRANSISTOR	2	MAIN
Q15	2SB0709ARL	TRANSISTOR	1	MAIN
Q16-18	B1AACF000068	TRANSISTOR	3	MAIN
Q19,20	2SC4511PY	TRANSISTOR	2	B1BAEJ000008 MAIN
Q21,22	B1BCEJ000005	TRANSISTOR	2	MAIN
Q23	B1ACCF000041	TRANSISTOR	1	MAIN
Q24	2SD0601AQL	TRANSISTOR	1	MAIN
Q25-27	2SB0709ARL	TRANSISTOR	3	MAIN
R1	ERDS2TJ101	1/4W 100	1	JACK2
R1	ERJ6GEYJ473V	1/10W 47K	1	MAIN
R2	ERDS2TJ101	1/4W 100	1	JACK2

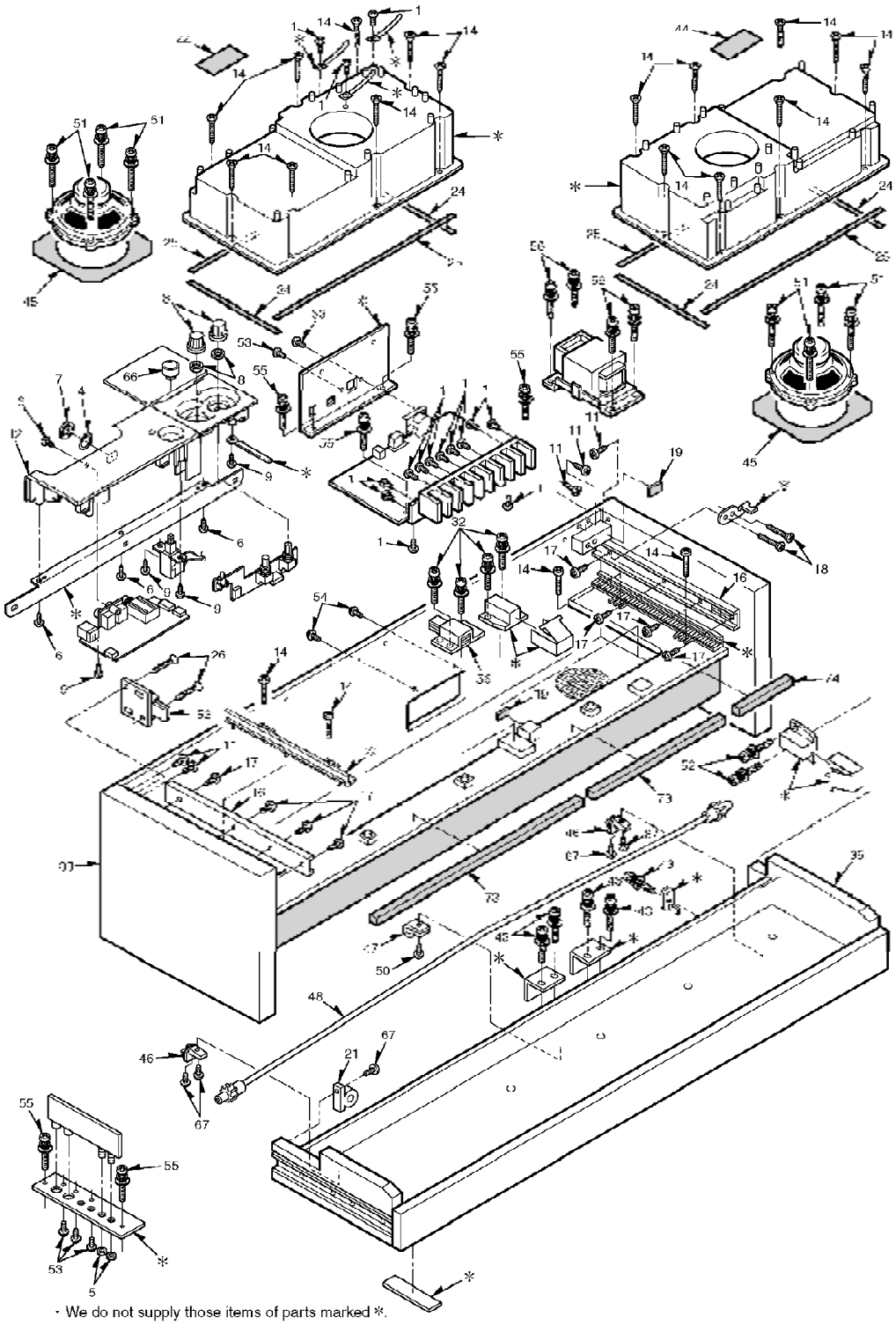
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2	ERJ6GEYJ103V	1/10W 10K	1	MAIN
R3	ERDS2FJ221	1/4W 220	1	JACK2
R3	ERJ6GEYJ152V	1/10W 1.5K	1	MAIN
R4	ERDS2FJ104	1/4W 100K	1	JACK2
R4	ERJ6GEYJ471V	1/10W 470	1	MAIN
R5	ERDS2FJ681	1/4W 680	1	JACK2
R5	ERJ6GEYJ101V	1/10W 100	1	MAIN
R6	ERDS2FJ681	1/4W 680	1	JACK2
R6	ERJ6GEYJ331V	1/10W 330	1	MAIN
R7	ERDS2FJ104	1/4W 100K	1	JACK1
R7	ERJ6GEY0R00V	1/10W 0	1	MAIN
R8-10	ERDS2TJ472A	1/4W 4.7K	3	PKB
R8	ERJ6GEYJ331V	1/10W 330	1	MAIN
R9,10	ERJ6GEYJ103V	1/10W 10K	2	MAIN
R11	ERDS2TJ563	1/4W 56K	1	JACK1
R11	ERJ6GEY0R00V	1/10W 0	1	MAIN
R12	ERDS2TJ563	1/4W 56K	1	JACK1
R12	ERJ6GEYJ472V	1/10W 4.7K	1	MAIN
R13	ERDS2TJ472	1/4W 4.7K	1	JACK1
R13	ERJ6GEYJ104V	1/10W 100K	1	MAIN
R14	ERDS2FJ222	1/4W 2.2K	1	JACK1
R14	ERJ6GEYJ471V	1/10W 470	1	MAIN
R15	ERDS2FJ104	1/4W 100K	1	JACK1
R15	ERJ6GEYJ104V	1/10W 100K	1	MAIN
R16	ERJ6GEYJ330V	1/10W 33	1	MAIN
R17	ERJ6GEYJ471V	1/10W 470	1	MAIN
R18	ERDS2TJ102	1/4W 1K	1	JACK2
R18	ERJ6GEYJ330V	1/10W 33	1	MAIN
R19	ERDS2FJ562	1/4W 5.6K	1	JACK1
R19,20	ERJ6GEYJ471V	1/10W 470	2	MAIN
R21	ERJ6GEYJ222V	1/10W 2.2K	1	MAIN
R22	ERDS2FJ222	1/4W 2.2K	1	JACK1
R22	ERJ6GEYJ102V	1/10W 1K	1	MAIN
R23	ERDS2FJ683	1/4W 68K	1	JACK1
R23	ERJ6GEY0R00V	1/10W 0	1	MAIN
R24	ERDS2TJ152	1/4W 1.5K	1	JACK1
R24	ERJ6GEY0R00V	1/10W 0	1	MAIN
R25	ERJ6GEYJ102V	1/10W 1K	1	MAIN
R26	ERJ6GEYJ101V	1/10W 100	1	MAIN
R27	ERDS2FJ222	1/4W 2.2K	1	JACK1
R27	ERJ6GEYJ471V	1/10W 470	1	MAIN
R28	ERJ6GEYJ470V	1/10W 47	1	MAIN
R29	ERJ6GEYJ472V	1/10W 4.7K	1	MAIN
R30	ERDS2TJ103	1/4W 10K	1	JACK1
R30	ERJ6GEYJ102V	1/10W 1K	1	MAIN
R31	ERDS2FJ223	1/4W 22K	1	JACK1
R31	ERJ6GEYJ103V	1/10W 10K	1	MAIN
R32	ERDS2FJ223	1/4W 22K	1	JACK1
R32	ERJ6GEY0R00V	1/10W 0	1	MAIN
R33	ERDS2FJ223	1/4W 22K	1	JACK1
R33	ERJ6GEYJ104V	1/10W 100K	1	MAIN
R34	ERDS2FJ223	1/4W 22K	1	JACK1
R34	ERJ6GEY0R00V	1/10W 0	1	MAIN
R35	ERDS2TJ102	1/4W 1K	1	JACK1

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R35	ERJ6GEY0R00V	1/10W 0	1	MAIN
R36	ERDS2TJ102	1/4W 1K	1	JACK1
R36	ERJ6GEYJ101V	1/10W 100	1	MAIN
R37	ERDS2FJ470	1/4W 47	1	JACK2
R37	ERJ6GEYJ104V	1/10W 100K	1	MAIN
R38	ERDS2FJ470	1/4W 47	1	JACK2
R38	ERJ6GEYJ472V	1/10W 4.7K	1	MAIN
R39	ERDS2FJ470	1/4W 47	1	JACK2
R39	ERJ6GEYJ472V	1/10W 4.7K	1	MAIN
R40	ERDS2FJ470	1/4W 47	1	JACK2
R40	ERJ6GEYJ472V	1/10W 4.7K	1	MAIN
R41	ERDS2FJ222	1/4W 2.2K	1	JACK1
R41-43	ERJ6GEYJ101V	1/10W 100	3	MAIN
R44	ERJ6GEYJ471V	1/10W 470	1	MAIN
R45	ERDS2TJ103	1/4W 10K	1	JACK1
R45	ERJ6GEYJ102V	1/10W 1K	1	MAIN
R46	ERDS2TJ103	1/4W 10K	1	JACK1
R46	ERJ6GEYJ103V	1/10W 10K	1	MAIN
R47,48	ERDS2TJ103	1/4W 10K	2	JACK1
R49	ERJ6GEY0R00V	1/10W 0	1	MAIN
R50	ERJ6GEYJ105	1/10W 1M	1	ERJ6GEYJ105V MAIN
R51	ERJ6GEYJ101V	1/10W 100	1	MAIN
R52	ERJ6GEYJ103V	1/10W 10K	1	MAIN
R53	ERJ6GEY0R00V	1/10W 0	1	MAIN
R54,55	ERJ6GEYJ471V	1/10W 470	2	MAIN
R56	ERJ6GEY0R00V	1/10W 0	1	MAIN
R57	ERJ6GEYJ222V	1/10W 2.2K	1	MAIN
R58-61	ERJ6GEYJ472V	1/10W 4.7K	4	MAIN
R62	ERJ6GEY0R00V	1/10W 0	1	MAIN
R63	ERJ6GEYJ222V	1/10W 220	1	MAIN
R64	ERJ6GEYJ221V	1/10W 220	1	MAIN
R65,66	ERJ6GEYJ682V	1/10W 6.8K	2	MAIN
R67	ERJ6GEYJ105	1/10W 1M	1	ERJ6GEYJ105V MAIN
R68	ERJ6GEYJ331V	1/10W 330	1	MAIN
R69	ERJ6GEYJ473V	1/10W 47K	1	MAIN
R70	ERQ2CJP4R7S	4.7	1	MAIN ⚠
R71	ERJ6GEYJ473V	1/10W 47K	1	MAIN
R72,73	ERJ6GEYJ223V	1/10W 22K	2	MAIN
R74,75	ERJ6GEYJ101V	1/10W 100	2	MAIN
R76,77	ERJ6GEY0R00V	1/10W 0	2	MAIN
R78,79	ERJ6GEYJ272V	1/10W 2.7K	2	MAIN
R80,81	ERJ6GEYJ223V	1/10W 22K	2	MAIN
R82	ERJ6GEYJ220	1/10W 22	1	ERJ6GEYJ220V MAIN
R83,84	ERJ6GEYJ333V	1/10W 33K	2	MAIN
R85,86	ERJ6GEYJ220	1/10W 22	2	ERJ6GEYJ220V MAIN
R87	ERD2FCG220	22	1	MAIN ⚠
R88	ERJ6GEYJ100V	1/10W 10	1	MAIN
R89	ERD2FCG220	22	1	MAIN ⚠
R90,91	ERJ6GEYJ102V	1/10W 1K	2	MAIN
R92	ERJ6GEYJ100V	1/10W 10	1	MAIN
R93,94	ERJ6GEYJ682V	1/10W 6.8K	2	MAIN
R95	ERJ6GEYJ220	1/10W 22	1	ERJ6GEYJ220V MAIN
R96	ERJ6GEYJ392V	1/10W 3.9K	1	MAIN

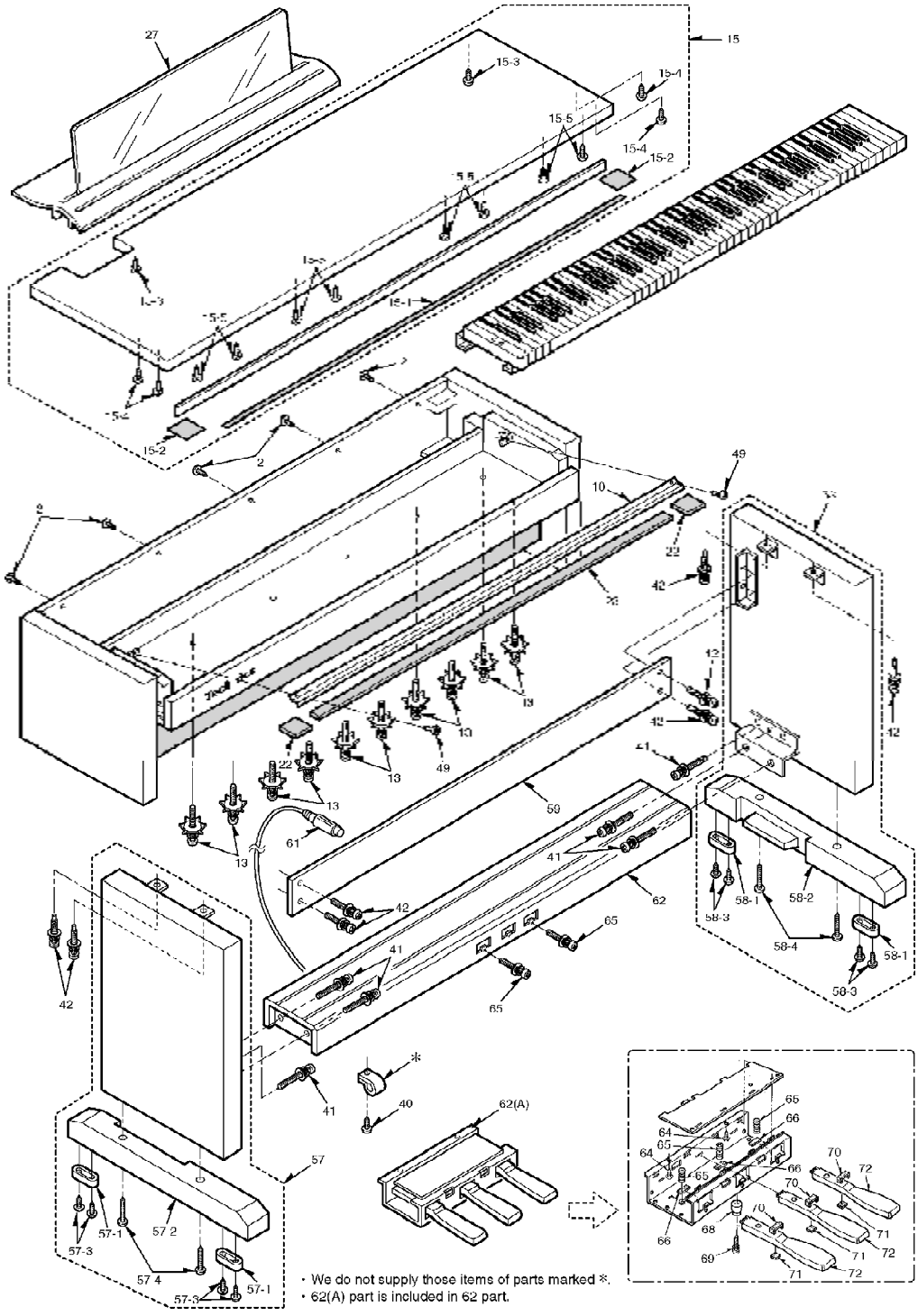
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R97,98	ERJ6GEYJ152V	1/10W 1.5K	2	MAIN
R99	ERJ6GEYJ392V	1/10W 3.9K	1	MAIN
R100,01	ERJ6GEYJ152V	1/10W 1.5K	2	MAIN
R102-07	ERJ6GEYJ224V	1/10W 220K	6	MAIN
R108,09	ERJ6GEYJ103V	1/10W 10K	2	MAIN
R111	ERJ6GEYJ332V	1/10W 3.3K	1	MAIN
R112	ERJ6GEYJ222V	1/10W 2.2K	1	MAIN
R114	ERJ6GEYJ332V	1/10W 3.3K	1	MAIN
R115	ERJ6GEYJ222V	1/10W 2.2K	1	MAIN
R117	ERJ6GEYJ184V	1/10W 180K	1	MAIN
R118	ERJ6GEYJ154V	1/10W 150K	1	MAIN
R120	ERJ6GEYJ184V	1/10W 180K	1	MAIN
R121	ERJ6GEYJ154V	1/10W 150K	1	MAIN
R122,23	ERJ6GEYJ223V	1/10W 22K	2	MAIN
R124-27	ERD2FCVJ6R8	100	4	MAIN ⚠
R129	ERJ6GEYJ564V	1/10W 560K	1	MAIN
R131	ERJ6GEYJ564V	1/10W 560K	1	MAIN
R132,33	ERJ6GEYJ102V	1/10W 1K	2	MAIN
R134	ERJ6GEYJ104V	1/10W 100K	1	MAIN
R135-38	ERJ6GEYJ272V	1/10W 2.7K	4	MAIN
R139	ERJ6GEYJ473V	1/10W 47K	1	MAIN
R140-43	ER0S2TKF1001	1/4W 1K	4	EROS2TKF1001 MAIN
R144,45	ER0S2TKF1002	1/4W 10K	2	EROS2TKF1002 MAIN
R146	ERJ6GEYJ103V	1/10W 10K	1	MAIN
R147,48	ERJ6GEYJ471V	1/10W 470	2	MAIN
R149	ERJ6GEYJ472V	1/10W 4.7K	1	MAIN
R150-53	ERD2FCVG101	100	4	MAIN ⚠
R154	ERJ6GEYJ472V	1/10W 4.7K	1	MAIN
R155,56	ERJ6GEYJ471V	1/10W 470	2	MAIN
R158	ERJ6GEYJ331V	1/10W 330	1	MAIN
R159	ERJ6GEYJ471V	1/10W 470	1	MAIN
R160,61	ERJ6GEYJ391V	1/10W 390	2	D0GD391JA003 MAIN
R162,63	ERJ6GEYJ331V	1/10W 330	2	MAIN
R164,65	ERJ6GEYJ103V	1/10W 10K	2	MAIN
R166	ERJ6GEYJ473V	1/10W 47K	1	MAIN
R167,68	ERJ6GEYJ471V	1/10W 470	2	MAIN
R169	ERJ6GEYJ102V	1/10W 1K	1	MAIN
R170	ERJ6GEYJ221V	1/10W 220	1	MAIN
R171,72	ERD2FCJ4R7	4.7	2	MAIN ⚠
R173	ERJ6GEYJ103V	1/10W 10K	1	MAIN
R174,75	ERJ6GEYJ471V	1/10W 470	2	MAIN
R176	ERJ6GEYJ332V	1/10W 3.3K	1	MAIN
R177	ERJ6GEYJ471V	1/10W 470	1	MAIN
R178	ERJ6GEYJ220	1/10W 22	1	ERJ6GEYJ220V MAIN
SP1,2	QASG14P02A	SPEAKER,14CM 6 Ω	2	
SW1,2	EVQ21507K	SW,TACT	2	SW
SW1	QSPG1010AA	SW,POWER	1	
SW1	QSRG005AA	SW,SELECTOR	1	MAIN*3
SW1	QSTGT001AA	SW,SOFT	1	K0D112A00015 PKB
SW2	QSTGT001AA	SW,SOSUTENUTO	1	K0D112A00015 PKB
SW3	QSTGT001AA	SW,SUSTAIN	1	K0D112A00015 PKB

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
T1	QTPG1M022A	POWER TRANSFORMER	1	G4C6AFD00002 (P,PC) ⚠
T1	QTPG1M025A	POWER TRANSFORMER	1	G4C6AFK00001 *2 ⚠
VR1	RK09L12B0	VR	1	VOL
VR2	RK09L1120	VR	1	VOL
W1	QEXGSS04006A	WIRE WITH CONNECTOR	1	
W2	QEXGSS04060A	WIRE WITH CONNECTOR	1	
W3	QEXGSS06055A	WIRE WITH CONNECTOR	1	
W4	QEXGSS07060A	WIRE WITH CONNECTOR	1	
W5	QEXGVH03065B	WIRE WITH CONNECTOR	1	
W6	QEXGSS08065A	WIRE WITH CONNECTOR	1	
W7	QEXGVH02040B	WIRE WITH CONNECTOR	2	
W8	QEXGSS16100A	WIRE WITH CONNECTOR	1	
W9	QEXGSS05085A	WIRE WITH CONNECTOR	1	
X1	QSXG1A2400A	24MHZ CERAMIC OSCILLATOR	1	H0H240500004 MAIN
X2	QSXG1A1200A	12MHZ CERAMIC OSCILLATOR	1	H0H120500006 MAIN
X3	SVQGA20MX040	20MHZ CERAMIC OSCILLATOR	1	H2A200500003 MAIN
X4	QSXG1A1128A	11.28MHZ OSCILLATOR	1	H0H112500002 MAIN
Z1	EXBV8V331J	330 Ω ×4	1	EXBV8V331JV MAIN
Z2	EXBS8V103J	10K Ω ×4	1	MAIN
Z3	EXBV8V152JV	1.5K Ω ×4	1	MAIN
Z4-Z9	EXBV8V471J	470 Ω ×4	6	EXBV8V471JV MAIN
Z10	EXBV8V101JV	100 Ω ×4	1	MAIN
Z11	EXBV8V471J	470 Ω ×4	1	EXBV8V471JV MAIN
Z12	EXBS8V471J	470 Ω ×4	1	MAIN
Z13	EXBV8V471J	470 Ω ×4	1	EXBV8V471JV MAIN
Z15	EXBV8V471J	470 Ω ×4	1	EXBV8V471JV MAIN
Z17	EXBV8V471J	470 Ω ×4	1	EXBV8V471JV MAIN
Z28	EXBV8V471J	470 Ω ×4	1	EXBV8V471JV MAIN
Z32,33	EXBS8V223J	22K Ω ×4	2	MAIN
Z34	EXBS8V471J	470 Ω ×4	1	MAIN
Z35,36	EXBV8V471J	470 Ω ×4	2	EXBV8V471JV MAIN
Z37,38	EXBS8V472J	4.7K Ω ×4	2	MAIN
Z39-44	EXBV8V471J	470 Ω ×4	6	EXBV8V471JV MAIN

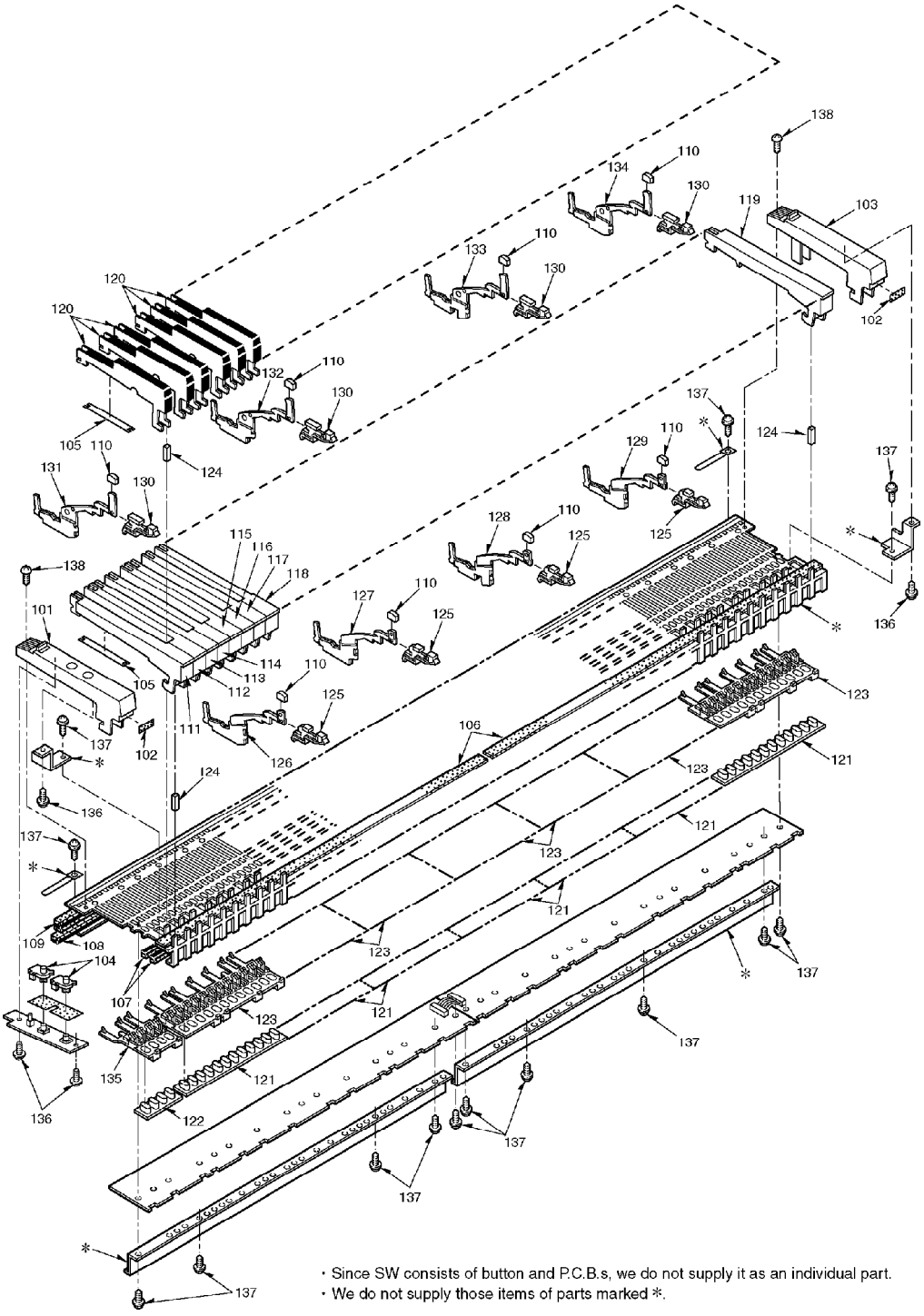
15. Cabinet Parts Location



・We do not supply those items of parts marked ✻.

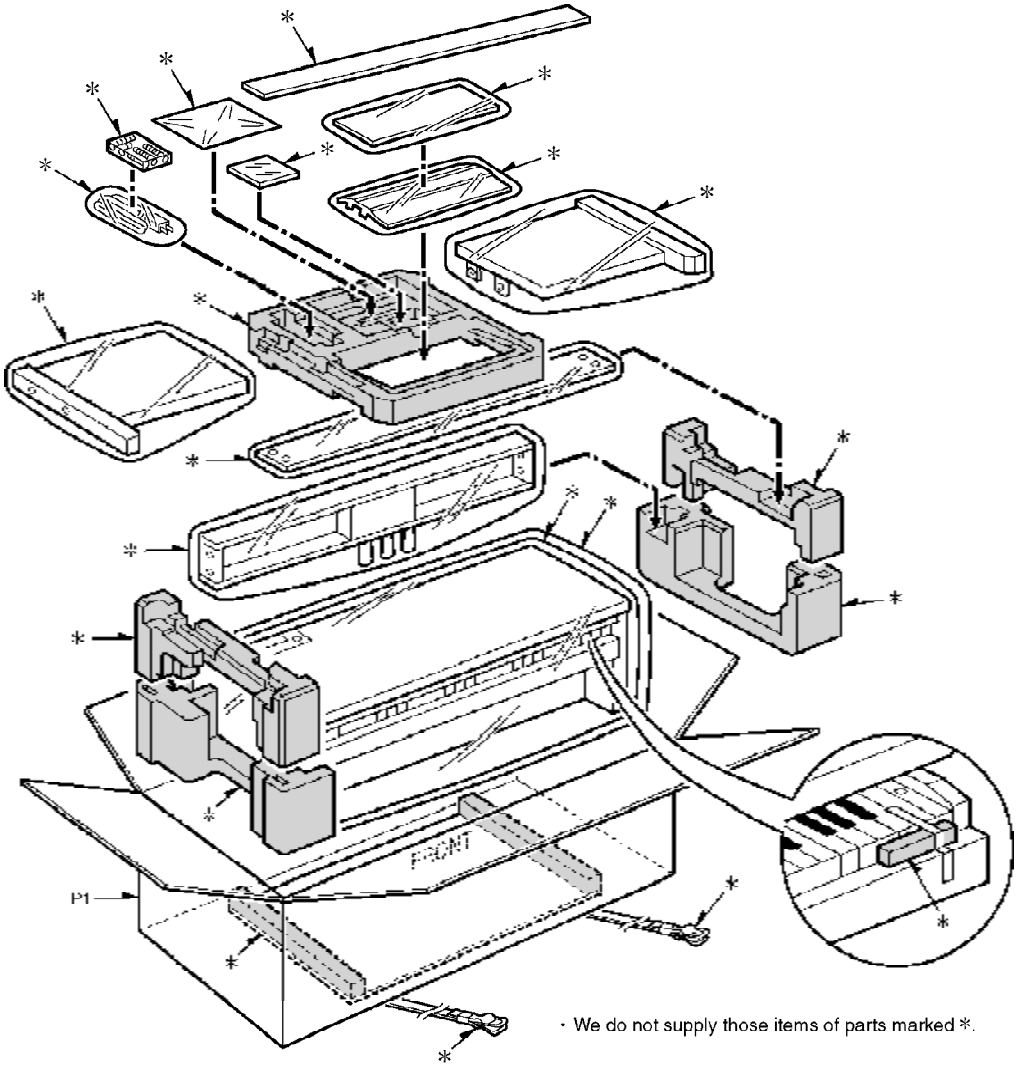


16. Manual Keyboard Parts Location



・Since SW consists of button and P.C.B.s, we do not supply it as an individual part.
・We do not supply those items of parts marked *.

17. Packaging



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